Dear Member,

YORKSHIRE REGIONAL FLOOD AND COASTAL COMMITTEE

I enclose the agenda and all supporting papers for your forthcoming meeting.

As previously notified, this meeting will be held on Thursday, 30th April 2020 at 10:15am to 12:45pm, and will now take place remotely.

As you will note in the Chair’s quarterly update, unfortunately, the current RFCC regulations do not allow for a remote Committee attendance, and whilst it is hoped that changes to these regulations will have been made by Defra by the time of the next meeting in July; however, as things stand at present, the Committee quorum can only be achieved by members “present” and voting can only be undertaken by members “present”. Consequently, members can only register that they are ‘minded to/notionally agree’ to the recommendations made in the papers, especially concerning the agenda item 5.1 YRFCC/296, which can then be subsequently formally ratified at the next Committee meeting, whether it takes place ‘in person’ or the changes will have been made to current legislation/Committee regulations to allow remote decision making.

If you are unable to attend the meeting, please let me know. For local authority members unable to attend, can you please ensure that your nominated substitute member or another person appointed by your council attends on your behalf. Please let me know the name of the substitute in advance of the meeting so that I can notify the Chair.

Please do not hesitate to contact me should you have any queries and/or if I can be of any further assistance. I look forward to seeing you at the meeting.

Thank you.

Yours sincerely,

Kind regards

Amer Bhatti
Project Manager Flood & Coastal Risk Management

And YRFCC & Sub-regional Flood Risk Partnerships Secretary

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YRFCC e-mail: yrfcc@environment-agency.gov.uk

Direct e-mail: amer.bhatti@environment-agency.gov.uk
External: 020 302 56365 | Mobile: 07786 523779
# YORKSHIRE REGIONAL FLOOD AND COASTAL COMMITTEE

**10:15 – 12:45 – 30 April 2020- The meeting will take place remotely.**

## AGENDA

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<th>No.</th>
<th>Item</th>
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<th>Relevant Paper</th>
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<td>1.</td>
<td>Chairman’s Announcements</td>
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<tr>
<td>10:15</td>
<td>Welcome, Apologies for Absence and Introductions</td>
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<td>2.</td>
<td>Governance Issues</td>
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<td>2.1</td>
<td>Declarations of Interests</td>
<td>Colin Mellors</td>
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| 2.2 | Minutes of last YRFCC Meeting  
- Confirmation of Accuracy  
- Matters Arising | Colin Mellors | Minutes |
| 3.  | Items for Presentation | | | |
| 3.1 | Yorkshire Area High Level Update to include:  
- February 2020 Flooding in Yorkshire and Recovery Update and Covid-19 Update | Adrian Gill, Neil Longden and Oliver Harmar | Verbal Update |
| 4.  | General YRFCC Business Update | | | |
| 4.1 | YRFCC Business Update:  
- Chairman’s Update includes the following appendices:  
  - National FCERM Update Paper  
  - Yorkshire Area EA Written Update | Colin Mellors | YRFCC/295 |
<p>| 5.  | Decision Items for Consideration: Asset Management and Investment | | | |
| 5.1 | Programming &amp; Investment Sub-Group Chair’s Report and Programme Update including Local Levy and the Sub-Regional Flood Risk Partnerships Meetings Updates | Bill Rodham | YRFCC/296 | A01-A09 |
| 5.2 | 2020/21 FCERM Grant in Aid (GiA) Indicative Allocation for Capital and Revenue Funding | Bill Rodham | YRFCC/297 |
| 6.  | Items for Discussion | NONE | | |</p>
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<td>7.</td>
<td><strong>Items for Information</strong> (not for discussion at the meeting)</td>
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<td>7.1</td>
<td>• Humber Strategy Update</td>
<td>Philip Winn</td>
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<td>YRFCC/298</td>
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<td>• Any Other Urgent Business</td>
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<td>• Forward Plan of the Committee</td>
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<td>• Date and Time of Future Meetings 2020</td>
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The arrangements for the remaining 2020 YRFCC meetings, see dates below, will be reviewed in due course.

1. Thursday 23 July 2020
2. Thursday 22 October 2020

12:30  **CLOSE OF MEETING**
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<th>Abbreviation</th>
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<td>The number of households moved from the very significant or significant probability category to the moderate or low probability category</td>
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<td>OM2c</td>
<td>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.</td>
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<td>The number of households with reduced risk of coastal erosion</td>
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<td>The number of households protected against loss in 20 years from coastal erosion</td>
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<td>OM3c</td>
<td>The number of households in the 20% most deprived areas protected against loss in 20 years from coastal erosion</td>
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<td>Hectares of water dependent habitat created or improved to help meet the objectives of the Water Framework Directive</td>
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<td>OM4b</td>
<td>Hectares of intertidal habitat created to help meet the objectives of the Water Framework Directive for areas protected under the EU Habitats/Birds Directive</td>
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<td>OM4c</td>
<td>Kilometres of rivers protected under the EU Habitats/Birds Directive improved to help meet the objectives of the Water Framework Directive</td>
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MINUTES OF MEETING OF YORKSHIRE REGIONAL FLOOD & COASTAL COMMITTEE
Novotel Hotel, 4 Whitehall, Whitehall Quay, Leeds, LS1 4HR
Thursday, 23 January 2020 AT 10.15 AM

Present:
Professor Colin Mellors  Chair

LLFAs Members
Councillor Jane Scullion  Calderdale Council  until agenda item 3
Councillor Andrew Waller  City of York Council
Councillor Garry Hickton  Derbyshire County Council
Councillor Chris Matthews  East Riding of Yorkshire Council (ERYC)
Councillor Mike Thompson  Hull City Council
Councillor Mohammed Rafique  Leeds City Council
Councillor Dave Sheppard  Rotherham Metropolitan Borough Council
Councillor Mark Jones  Sheffield City Council

LLFAs Sub Members
Councillor Sarah Tattersall  Barnsley Metropolitan Borough Council
Mr Ed Norfolk  Bradford Council  from agenda item 4
Mr Steve Wragg  City of York Council
Mr Kyle Heydon  Doncaster Metropolitan Borough Council  until item 5
Mr Tom Ghee  Kirklees Council
Mr Jonathon Moxon  Leeds City Council
Mr Gareth Roberts  North Yorkshire County Council
Mr Paul Maddison  Wakefield Council

EA Appointed Independent Members
Mr Andrew McLachlan  EA Appointed Independent Member  until agenda item 5
Mr Geoff Roberts  EA Appointed Independent Member
Mrs Julie Gledhill  EA Appointed Independent Member
Mr Jeremy Walker  EA Appointed Independent Member

EA Board Member and Officers:
Mr Oliver Harmar  EA Yorkshire Area Director
Mr Adrian Gill  EA Area Flood & Coastal Risk Manager
Mr Neil Longden  EA Area Flood & Coastal Risk Manager
Mr Bill Rodham  EA Programme Team Manager
Mr Martin Slater  EA Operations Manager
Mr Amer Bhatti  YRFCC Secretary
Mr Luke Waddington  EA Programme Team

In Attendance:
Mr Stewart Rowe  Chairman North East Coastal Group
Mr Gary Collins  Yorkshire Water

There were 23 observers at the meeting, which included members of the public and officers of various organisations.
APOLOGIES FOR ABSENCE: Apologies were received, in advance of the meeting, from:

Lead Local Flood Authorities (LLFAs) Members: Councillor Chris Lamb (Barnsley Metropolitan Borough Council), Councillor Mike Ellis (Bradford Council), Councillor Chris McGuinness (Doncaster Metropolitan Borough Council), Councillor Donald Firth (Kirklees Council), Councillor David Jeffels (North Yorkshire County Council) and Councillor Jessica Carrington (Wakefield Council).

Others: Mr Simon Keys (EA Appointed Independent Member), Ms Lynne Frostick (EA Board Member) and Mr Gavin Usher (EA Operations Manager).

1. CHAIR’S ANNOUNCEMENTS

1.1 Welcome and Apologies for Absence:

The Chair welcomed all present to the meeting, especially invited guests and observers. The Committee noted the apologies that had been received along with the substitute members (as shown above), who had been confirmed by LLFAs in advance of the meeting.

1.2 Health and Safety:

Members were advised that no fire alarm test was planned and that, in case of a fire alarm, all present should evacuate the building by following the fire exit signs.

2. GOVERNANCE ISSUES

2.1 Declaration of Interests: The following members declared their respective interests, as follows:

- The Chair declared an interest as a Board member of the York, North Yorkshire and East Riding LEP Board; a member of the Derwent Partnership Board and an Independent Member of South Craven Academy Trust.
- Cllr Andrew Waller declared an interest as a member of West Yorkshire Combined Authority / Leeds City Region LEP.
- Cllr Jane Scullion declared an interest as a member of the Leeds City Region’s Investment Committee.
- Mr Paul Maddison declared an interest as a member of the Danvm Drainage Board.
- Mr Kyle Heydon declared an interest as a member of the Danvm Drainage Board.
- Mr Geoff Roberts declared an interest as Chair of the River Aire Trust.
- Mr Andy McLachlan declared an interest as Chief Executive of Ouse and Humber Drainage Board (OHDB) and director of 5 other IDBs.

2.2 Minutes of Last Meeting:

2.2.1 Confirmation of Accuracy: The Committee accepted the minutes as a true record of the 24/10/2019 meeting.

2.2.2 Matters Arising: Cllr Waller referred to the Climate Change agenda and suggested that the EA should liaise closely with LLFAs to discuss and progress this agenda. He also requested that Climate Change should be discussed as an agenda item at the forthcoming Sub-Regional Partnerships and at the April 2020 Committee meeting. Julie Gledhill echoed this and also asked to receive an update on the EA’s carbon 2030 target at a future Committee meeting. Oliver Harmar provided brief update on the EA’s carbon 2030 target and Amer Bhatti
advised members that he had already liaised with Rosa Foster, who is leading on Climate Change for the EA in the Yorkshire Area, and it would be included as an agenda item in the next round of the partnerships.

2.2.3 **Key Actions from Previous Meeting:** The Chair advised the meeting that the key actions emerging from the previous meeting were either completed or were in progress.

Resolved - Agenda item 2:

The Committee agreed:

- To approve minutes of its meeting held on 24th October 2019 as a true record.

3. **ITEMS FOR PRESENTATION**

3.1 **November 2019 Flooding in Yorkshire and Recovery Update:** Adrian Gill provided an informative update on the November flooding in Yorkshire and the ongoing recovery works. The following key points were noted:

Adrian noted the complexity of the Don Catchment due to variable topography and the area's prominent mining legacy. During the autumn, 150% of the average rainfall had fallen in the catchment in just 48 hours, adding to the heavy rain just two weeks prior. The hydrograph presented at the meeting compared 2019 and 2007 events, and indicated remarkable similarity. In both cases, heavy rainfall events occurred two weeks prior to the flooding.

It was noted that, whilst several key schemes in South Yorkshire had worked in protecting a large number of homes/businesses, others had suffered considerable flooding in areas like Fishlake and Bentley in Doncaster, South Yorkshire, where local emergency services had evacuated approximately 1,200 properties (circa 1,600 people). Over the period, the EA had issued 7 Severe Flood Warnings for locations along the River Don: Barnby Dun, Bentley, Fishlake, Kirk Bramwith, South Bramwith, Kirk Sandall and the Willow Bridge Caravan site. Approximately 1,000 homes and businesses had been affected by the November 2019 floods.

During the incident, approximately 52 EA, IDB, YW and Fire Service pumps (including temporary pumps) were used across ten locations in South Yorkshire with a total pumping capacity of 20.85 cumecs. In addition, the Army had been called to support the affected areas. Whilst the focus of flooding was in South Yorkshire, some parts of East Yorkshire were also affected with a small number of properties also flooded.

It was noted that the Sheffield Lower Don Flood Alleviation Scheme had performed well and Rotherham to Kilnhurst Flood Alleviation Scheme Phase 1 was successful in protecting many homes and businesses. However, Rotherham’s train station was flooded and was not operational for several days.

Adrian said that it had been a very busy time for the EA, councils, the military, emergency services, and especially the local residents and volunteers, who had worked tirelessly and around the clock. Both EA incident rooms (in York and Leeds) remained fully operational and local authority resources were also stretched throughout this period.

Mention was made of the EA’s ‘mutual aid’ arrangements (i.e. deploying kit and personnel from other regions during incidents) which had been very helpful and effective. At the peak of the incident, nearly 300 people had been involved in any one day, some drawn from other
parts of the country. Whilst this inevitably meant that they did not have the same level of local knowledge, their involvement was absolutely critical in the management of the event.

Members expressed their concern for those so badly affected by the flooding, many of whom were still struggling to come to terms with what had happened and how they might reconstruct their homes and their lives. Adrian noted that much effort was now going into understanding more precisely the events that had occurred, the causes, and what lessons could be learned.

The EA had now moved into recovery mode, with washlands being drained and large-scale asset inspections being undertaken. Temporary defences had been put in place in areas of concern where assets could be in poor condition. Members commended the extent of community engagement and acknowledged the recognition that had been given to EA and partner organisations for all the work that had been undertaken.

Oliver Harmar, EA Yorkshire Area Director, praised the great partnership work displayed during this event. Members noted that non-stop rainfall events, such as this one, demonstrate the critical importance of our assets, existing and new. Although it had worked throughout, it was noted that the enhancement of Bentley Pumping Station, which was due to be completed in March would be delayed because the site itself had been flooded during this event.

During discussion, the following points were noted:

- The incident had provided an opportunity to assess the effectiveness of flood risk investments that had been made over recent years. Though many river levels had met or exceeded those of 2007, there were far fewer impacts than at that time. In the Doncaster area alone, for example, 3,286 properties were flooded in 2007 compared with c. 650 this time. It was estimated that almost 7,000 homes in total had been protected by recently-delivered FRM schemes in South Yorkshire. Members also noted the adverse economic impact of flooding and agreed that it would be helpful to better understand this aspect. It was suggested that the South Yorkshire LEP would be able to further information in due course.
- Climate Change had moved up the political agenda and it was felt likely that the November event might lead to even greater recognition of the importance of FCERM investment. At the same time, some members were concerned about the implications of these events on the scheduled delivery and cost of schemes in the current six-year programme. Mention was also made about the capacity of contractors able to undertake further work. It was felt helpful if the implications of any consequent delays this could be clarified.
- It was important to continue to work collaboratively during recovery mode. Members acknowledged strong partnership working, e.g. Yorkshire Water, who had made their resources available in several locations in Hull to deal with various surface water related localised flooding. Members also observed the need to join forces to share lessons learned from the recent event.
- The importance of having adequate resources for all RMAs to inspect all assets was stressed, including those at risk from coastal erosion, to ensure that they remained fit-for-purpose. Again capacity issues were noted.
- The incident had also underlined the importance of a long-term investment programme after the current six-year programme.
- Concern was expressed about the consequences of continuing to build new dwellings in the flood plain since doing so would inevitably increase the risk of flooding. Planning authorities and LLFA colleagues were encouraged to work closely with their planning colleagues to address this concern.
Members discussed the contribution that Natural Flood Management could make and noted that the Environment Sub-Group was working on this aspect in order that there might be a better understanding how whole-catchment approaches might assist.

The Chair reflected that there was a growing understanding of, and support for, FCERM, partly as a result of growing awareness of Climate Change and partly through observing the severe impact of flooding on communities. It was important that the region made every effort to deliver current schemes, and associated benefits, by March 2021. Not only would this mean that 67,000 homes in our region would be better protected, but that we would be well-placed to secure and utilise new funding. Members echoed these thoughts and re-affirmed their commitment to deliver the protected homes target.

On behalf of the Committee, the Chair thanked Adrian for the informative presentation. On behalf of the Committee he expressed appreciation for all of the hard work undertaken by all partners during the event and sympathy for all those who had been so badly affected.

**Resolved - Agenda item 3:**

The Committee **agreed:**

- To express their sympathy and good wishes to all those affected by the flooding.
- To thank the EA, the local councils, the military, the IDBs and YW, the emergency services colleagues and, very importantly, the residents and volunteers, who worked tirelessly during, and after the floods.
- To note the presentation made by Adrian Gill, Environment Agency and thank him for updating members.

4. **GENERAL BUSINESS UPDATE**

4.1 **Chair’s Update** [YRFCC/289]: The Chair provided his quarterly written report to the Committee and drew members’ attention to both local and national updates. Members noted and thanked the Chair for the informative report. Key updates from the quarterly Chair’s meeting in December included;

- **Flooding, coastal change and community engagement:** discussions surrounded how we might best engage with coastal communities where being resilient to, or adapting to, coastal change often presented particular challenges.
- **Funding Workshop:** included an assessment of where/how we have secured partnership funding and some of the tools and training that have been developed.

Finally, the Chair expressed his pleasure of the official start of construction of Phase 2 of the Leeds Flood Alleviation Scheme. This phase of the £112m scheme, one of the largest in the country, is an 8km stretch upstream of Leeds to Kirkstall.

**Yorkshire Area EA Update:** Members noted local and national updates and thanked Neil Longden and Adrian Gill for producing the informative report, which included updates on the following:

- The Anlaby and East Ella FAS
- Cottingham and Orchard Park FAS
Item No: 2.2

- Hessle Foreshore Tidal Defence
- Pocklington FAS
- Humber: Estuary Erosion Protection (HEEP) Works 2
- Hebden Bridge FAS
- Clifton Ings Barrier Bank, York
- Hull River Defences – Phase 1, Phase 2 and Hull +.

Neil Longden provided verbal update and the following key points were noted:

- NYCC had progressed a draft section 19 report in response to the summer flooding which would help set the framework for future work in affected communities.
- Recovery grants had been made available to some local authorities and some of the farming community. These were led by the RPA and authorised through Defra. The EA had provided evidence of the rainfall and the catchment impacts to help the RPA make recommendations to Defra.
- Noted that the ERYC had delivered the AEEFAS and whilst the COPFAS scheme completion scheme had been delayed to the summer (due to earthwork conditions) both these schemes and WADFAS protected thousands of properties from the rainfall in November.
- The Hull and Holderness Drain scheme would be completed over the next 12/18 months as the planning permission was now in place for the pumping station.
- Groundwater flooding remained a risk in East Yorkshire, whereas the risk had reduced in Malton and Norton, where NYCC will be delivering a scheme in the next 12 months.
- Humber Hull Frontage was also progressing in line with the programme, with a number of working sites, and full planning permissions were in place. River Hull was also progressing in line with plans, and the River Hull+ scheme was near completion.
- Scarborough Borough Council (SBC) had completed work at Whitby Harbour and Scarborough Spa (with an opening planned for early March) and Whitby Church St was progressing well.
- SBC were delivering Filey which remained a key risk to delivering our OM2 target, as there was still no formal confirmation that landowner issues had been resolved.
- Work was completed ahead of schedule in York at Memorial Gardens and planning permission had been granted for work at Clifton Ings. Planning for Clementhorpe is due to be heard in March after we revisited the design to reduce the impact of road closures. Work at St Peters school would resume in spring when ground conditions improve, and the PFR deployment is progressing after initial issues with the framework suppliers.
- Finally, in York, approval for further spend had been agreed to complete the Foss Barrier works – with the increase in barrier size due to happen in April. This would take the total spend to approx. £35m.

National messages:

- Letters had been sent to LLFA Chief Execs to flag an opportunity for funding for local surface water mapping and modelling – this is Defra funded and an action through Boosting Action on Surface Water (published in July 2018). Application for grants was now open for the next 4 weeks.
- Flood and Coastal Conference was due to take place from 2 to 4 June – call out now for papers/presentations.

Julie Gledhill sought an update on the future of flood warning – Cell Broadcast Trials (CBT) and improving our data: Conceptual Data Model for FCRM, which were noted in the item
4.1 appendix 1. Members noted that the CBT had been delayed due to technical issues, which would be presented to the East Yorkshire Flood Risk Partnership at its next meeting and the Committee would be updated in due course. Neil agreed to forward further information regarding CDT to Julie.

**Resolved - Agenda item 4:**

The Committee agreed to:

- Note the updates from the Chair and the EA.

5. **ITEMS FOR APPROVAL / DECISION: ASSET MANAGEMENT AND INVESTMENT:**

5.1 Programming & Investment (P&I) Sub-Group Chair’s Report and Programme Update including Local Levy and the Sub-Regional Flood Risk Partnership Meetings Updates [YRFCC/290]: Papers discussed at the last P&I Sub-Group (held on 16 December 2019) were referred to in the report and were provided in the separate Technical Appendix as A01 to A07. Bill Rodham drew the Committee’s attention to the following key highlights:

- Our baseline financial position for 2019/20 showed an affordable investment of £137.5m across all funding schemes. Our forecast was for £127m.
- The investment of £127m in 2019/20 will deliver just over 20,715 properties better protected from flooding or coastal erosion and create or improve 44Ha of biodiversity habitat.
- The top 10 projects in terms of OM delivery from 2019/20 to 2020/21 deliver over 41,000 of the remaining 44,000 to be delivered. We had high confidence of delivering 8 out of the 10 projects with 2 having a lower confidence. Explanations of the confidence rating for these 2 projects was provided in the paper.
- The programme showed a strong economic return on the investment from schemes delivering outcome measures. The present value of benefit for schemes delivering in the current investment period was over £5 billion.
- Our position for asset condition in high consequence systems, as at 1st November 2019, was 95.2% and 91.8% against targets of 97.0% and 92.3% for EA and Third party maintained assets respectively. However this did not take into account the effects of the recent flooding.
- We continued to progress on our efficiency target with £2.04m of efficiencies accepted by Q2. This remains a challenging target.
- We reviewed the Local Levy programme in detail and noted that, following the Committee’s approval of in-year additions to the Levy programme in October 2019, the programmed value of work for 2019/20 was just under £3m.
- As at the end of November 2019, just under £1.1 million had been spent, with an indicative full-year forecast of just over £2.8 million. £800,000 of remaining spend was dependent upon claims being made by other RMAs.
- The Sub-group were notified of the re-profiling of funding between two Bradford Flood Programme Board projects in 2019/20. There was one request to re-profile a funding allocation from 2019/20 into 2020/21. The Sub-group were advised that one allocation made for 2020/21 had been drawn down early and will be re-profiled into 2019/20.
- Following a requirement for the last Sub-Group meeting that outstanding Levy requests for the remainder of the current six-year programme be provided for consideration, we received no new Levy requests for this round. There are opportunities for projects to be
added into the programme before the end of 2020/21 without the programme becoming overcommitted.

- We received reports from the Sub-Regional Partnership Meetings.

**Members Discussion:** Following the presentation, members discussed and approved all three recommendations of the report [YRFCC/290] including re-profiling requests and the future year's indicative Local Levy profile as detailed in Technical Appendix A06. The following key comments were noted.

- The Chair re-emphasised the importance of Local Levy funding and thanked the LLFAs members' for their support, especially for unanimously agreeing to a modest increase at the last meeting.
- Members noted that, due to pre-election period, there had not been any further discussion at the December 2019 P&I meeting in relation to the Partnership Funding for the Future FCERMS Investment Programme. Members noted that the Chair and the EA colleagues had already raised the Committee's disappointment that additional asset repair funding did not extend beyond EA assets. The EA would advise as and when further information becomes available.

5.2 2020/21 FCERMS Grant in Aid (GiA) Indicative Allocation for Capital and Revenue Funding, including Yorkshire Area Update [YRFCC/291]:

Bill Rodham explained that the purpose of this paper was to ask Committees to discuss and consent their capital and revenue indicative allocations for 2020/21, with the following headline messages;

- As in previous years, the capital programme is being prioritised by homes better protected.
- Rather than doing a full refresh this year we have retained, as closely as possible, the existing allocations for 2020/21.
- All RFCC local choices submissions which met the criteria were approved.
- The most likely outcome, relative to the national 300,000 homes target, is now 315,000 homes better protected by the end of the 6-year programme in March 2021.
- Delivery of 30,000 homes remains dependent on securing a further £30m-£40m of partnership funding contributions.

A simple guide to the annual allocation process was set out in the appendix of the April 2019 National Allocation paper. The summary capital and revenue funding allocation cycles have been included in Appendix E as a reminder.

Members thanked Bill Rodham for the detailed reports.

5.3 IDB Precepts – Setting the Rate for 2020/2021 [YRFCC/292]

Martin Slater presented the report, which proposed the level of 2020/21 precepts on Internal Drainage Boards, for Committee approval. Members noted that the EA was required to set a precept on Internal Drainage Boards (IDBs) under Section 139 of the Water Resources Act 1991 which states that “the Environment Agency shall by resolution require every Internal Drainage Board to make towards the expenses of the Environment Agency such contribution as the Environment Agency may consider “to be fair”.

Members noted that, once again, it was proposed to maintain a standstill in the level of precept raised and also noted the improved transparency of our maintenance plans, the improved
engagement with the IDBs together with the proposed standstill in the precept demonstrates that the proposal was a fair one.

Cllr Chris Mathews (ERYC) moved the motion to approve a standstill budget, which was seconded by Cllr Scullion (Calderdale) and agreed by all present.

Resolved - Agenda item 5:

5.1 The Committee agreed the recommendations of the papers [YRFCC/290] that the YRFCC:

1. Approve the re-profiling of allocations between 2019/20 and 2020/21;
2. Approve the 2019/20 Local Levy programme as detailed in Technical Appendix A06 (Local Levy for Approval).
3. Approve the future year’s indicative Local Levy profile as detailed in Technical Appendix A06.

5.2 The Committee agreed the recommendations of the papers [YRFCC/291] that the YRFCC:

1. Note the allocation principles for the 2020/21 FCRM GiA capital allocation (Appendix A).
2. To review and consent the final draft indicative allocations for FCRM capital GiA funding (Appendix B).
3. To review and consent the final draft indicative allocations for FCRM revenue GiA funding (Appendix C).

5.3 The Committee agreed the recommendations of the papers [YRFCC/292] that the YRFCC; approve a standstill in the level of IDB precepts raised totalling £1,140,958, as set out in Appendix 1. The motion was moved by Cllr Chris Mathews (ERYC), seconded by Cllr Scullion (Calderdale) and agreed by all present.

6. ITEMS FOR DISCUSSION: NONE

7. ITEMS FOR INFORMATION (not for discussion at the meeting):

7.1 Humber Strategy Update [YRFCC/293]: The Committee noted the report.
7.2 YRFCC Environment Sub-Group Chair’s Report [YRFCC/294]: The Committee noted the report.

Resolved - Agenda item 7:

The Committee noted below reports.

7.1 Humber Strategy Update [YRFCC/293]
7.2 YRFCC Environment Sub-Group Chair’s Report [YRFCC/294]

8. COMMITTEE ADMINISTRATION

8.1 Any Other Urgent Business: NONE

8.2 Forward Plan of the Committee: Members were advised to let the Secretariat know if they wished to raise any particular issues as an agenda item at a future meeting.
8.3 **Actions from Last Meeting:** It was noted that all key actions from the October 2019 meeting were either completed or were in progress.

8.4 **Date and Time of Future Meetings 2020:**

Members noted the dates and times of the YRFCC 2020 meetings (listed below) which will be held at the Novotel Hotel, 4 Whitehall, Whitehall Quay, Leeds, LS1 4HR, on the below dates. The pre-local authority meeting will start at 9:15am and the main Committee meeting will start at 10:15am.

1. Thursday 30 April 2020
2. Thursday 23 July 2020
3. Thursday 22 October 2020
Preface

1. It is difficult to know how best to start, and to write, this quarterly update. Each of my recent updates began by commenting on the unusual context in which we found ourselves. This time the circumstances would have been unimaginable just three months ago. It is only proper, therefore to begin by expressing the hope that all colleagues and their families are, and will remain, well.

2. The first responsibility of any organisation is the health and wellbeing of employees and those with whom they come into contact. A subsequent one, in so far as is safe and practicable, is to continue to deliver essential business as far as possible in the prevailing circumstances. In both these regards, this is an opportunity to pay tribute to how colleagues across the flood risk community have responded to the new conditions, found innovative ways of working and, not least, shown support and understanding for their own colleagues. EA and LLFA staff have been in either incident or recovery mode consistently since last November and now face the added worry of Covid-19.

3. We extend particular thoughts, of course, to those who suffered in the most recent flooding and are now facing the additional stress and worry of the Covid-19 pandemic, some away from their homes and possessions. I hardly need mention what could have happened had the two events coincided. I am sure that I am not the only one who has been re-thinking their own priorities over the last few weeks, and it is to be hoped that one positive that might emerge from these dreadful circumstances is that we will all have a better appreciation of the forces of nature and how, individually and collectively, we can best help address the challenges we face.

4. There is one immediate consequence for today’s meeting. Current Defra/EA regulations do not provide for remote attendance and we have been advised that the ‘quorum for voting can only be achieved by members present and voting can only be undertaken by members who are actually present’. It is hoped that Defra will have been able to update the regulations (in line with some other public bodies) by the time of the July round of RFCC meetings. In the interim, it has been suggested that items discussed, and notionally agreed at this virtual meeting, can be formally ratified at a subsequent meeting.

5. It feels slightly surreal to move quickly on to my more normal update but, in the interests of keeping members briefed even in these worrying times, I will do so following the usual report structure.
February Flooding

6. Sadly, as in last quarter’s update, I have to begin by referring to the latest flooding to hit our region. In November, the focus of the incident mainly affected South Yorkshire and parts of East Yorkshire; this time it was mainly West Yorkshire - the Calder Valley in particular – and the Lower Aire, although several other parts of our region were also badly affected in the February storms.

7. Each time that I write about these incidents, I generally refer to records being broken and this quarter is no exception. The Met Office has confirmed that England experienced the wettest February on record and the fifth wettest of any calendar month since 1862. In response to February’s rainfall, the EA deployed over 5 km of defences, 90 mobile pumps and over 1,000 staff each day across England. The Flood Information Service received approximately 22 million hits over the combined period of the two storms (Ciara and Dennis). It is calculated that there were 3 million digital users, of whom 2.8 million were new. The length, number and distribution of flood warnings also broke records.

8. I will leave it to Adrian and colleagues to provide a more detailed picture of what happened in our region as a result of Storm Ciara (thankfully Storm Dennis largely avoided our region). Instead, I will restrict myself to a few general observations.

9. **Performance of previous investments:** Although this will be of little comfort to those whose properties were badly damaged, and to those where new defences are still to be completed, it is important to note that the defences put in place recently helped significantly in preventing damage to many more homes and residents. This is illustrated by a national estimate compiled in the immediate aftermath of the two February storms.

<table>
<thead>
<tr>
<th>Flood Event</th>
<th>Total Flooded (England)</th>
<th>Total Protected (England)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storm Dennis (Feb 2020)</td>
<td>1,560</td>
<td>24,680</td>
</tr>
<tr>
<td>Storm Ciara (Feb 2020)</td>
<td>1,340</td>
<td>23,414</td>
</tr>
</tbody>
</table>

NB The figures for flooded properties were subsequently revised upwards slightly following more complete reporting from councils following the event and, in our region, it is calculated that Ciara resulted in damage to 1,200 Calderdale residential and commercial properties and to 300 across Kirklees and Bradford. Nevertheless, the comparisons with the numbers protected remain evident.

10. Taken together, the November and February flooding saw 4,633 properties flooded, but 128,141 protected. Put simply, the work instituted in recent years did make a substantial difference to what would otherwise have happened. Without the schemes, the damage, and the number of people affected, would have been far greater. Another way of illustrating this is to compare the number of homes flooded in February with those in previous events in 2007 (55,000), 2013/14 (11,000) and 2015 (17,000). This underlines the importance of completing the current investment programmes as well as the rationale for the new, and even more ambitious, multi-year programme from April 2021 (see below).

11. **Recovery:** Capacity and maintenance are two recurrent themes for the YRFCC.
An important task during the recovery stage will be to assess, repair and, where possible, augment existing assets as well as instituting new ones. The importance of capacity to do so, as well as the funding, is a regular observation at our meetings.

12. **Resilient Communities:** A few days after the Calder Valley flooding, Cllr Jane Scullion kindly arranged for me to visit Hebden Bridge and to talk to some of those most closely involved. The two themes that I took away were: the remarkable spirit and fortitude of local volunteers and communities and the recurring references to ‘resilience’. Sadly, Calder Valley residents are all too used to the threat of flooding and have been remarkably creative in how they have applied their own property-level flood resilience (PFR) measures. Some shop owners, with relatively simple adaptations, were able to avoid damage to their stock and were able to re-open within just a few days. Many more, of course, were less fortunate and will take far longer to recover. Jane kindly agreed to try to assemble more information about the performance of PFR measures in the Calder Valley.

13. **Longer-term:** A recurrent theme in YRFCC discussions has been the wider and lasting implications of flooding, not least for those communities subjected to repeated events such as the Calder Valley. It is estimated that, for every home flooded, a further sixteen people will be adversely affected through the impact on businesses, schools, transport and essential infrastructure. The effect is compounded by the difficulties that vulnerable small businesses face in getting insurance and this was another recurring theme that we heard.

14. I have two final comments on the February incident. The first, of course, is to express the thanks of the Committee to all those who worked so tirelessly – the front-line responders and the very many volunteers – who helped both during the event and afterwards in the recovery. The second is that that many of the themes raised by the February event will align very strongly with the forthcoming FCERM Strategy that, it is hoped, will be published in the very near future.

**National Scene**

15. The quarterly national Chairs’ meeting in February took place in the immediate aftermath of the two February storms and, as might be expected, tended to dominate our discussions. Other key topics included: anticipation about the contents of the forthcoming Budget; the possible timing of the publication of the new national FCERM strategy and, separately, Defra’s FCERM policy statement; the findings of the review into the Toddbrook reservoir incident last July; and emerging findings from the Surface Water Flooding review that is being led by a fellow Chair, David Jenkins.

16. As usual, I have highlighted a few national issues that might be of particular interest and the customary EA National Briefing is attached to this paper.

**Budget**

17. By now, colleagues will have seen the announcement outlined in the Chancellor’s Budget last month and will, no doubt, join with me in welcoming the next six-year settlement. Clearly, the increased funding is evidence of the Government’s confidence in the work that has already been undertaken alongside recognition of the increased challenges faced and the implications of climate change.
18. Key aspects include:

- £5.2bn capital funding for the next six years (April 2021 to March 2027) to better protect 336,000 properties. It is significant that, in the next programme, properties will include both homes and non-residential properties, such as shops, businesses, schools, hospitals, etc.

- An additional £200m for a place-based resilience programme over the six-year period. Discussions with Defra are still taking place about how this will be allocated and details will be announced in due course.

- An additional £25m revenue funding for people and some non-staff costs for 2020/21.

- £140m of the £5.2bn will be brought forward into 2020/21. Of the £140m, £100m is a ‘pipeline development fund’ to give the next programme a ‘warm’ start by commencing some work early on schemes that will then better protect properties in the next 6-year programme. A further £40m is for work on assets where historically we have struggled to secure partnership funding. More details on the £40m will follow shortly.

- An additional £120m for recovery funding for 2020/21 to repair assets damaged in the autumn and winter floods (split £58m for capital and £62m for revenue).

19. Further details about the implications for 2020-21 of the new funding are shown in Paper (agenda item 5.2 YRFCC/297) FCERM Grant in Aid Indicative Allocation for Capital and Revenue Funding later on this agenda.

**Partnership Funding**

20. On 17 April, Defra announced a number of changes to the way funding will be allocated to flood risk management schemes, including recognition of the wider benefits that flood alleviation projects can bring. At the same time, the EA (www.gov.uk/guidance/partnership–funding) published new guidance for partnership funding. They will also be hosting a series of briefings and have established a new partnership funding SharePoint site - a central place for advice and support.

21. It is anticipated that the current 6-year FCERM capital investment programme will have secured around £600m in partnership funding. This has enabled an additional 400 schemes and 66,000 additional properties being better protected. It is hoped that the new programme announced in the Budget will build on that success.

22. The main changes are:

- updated payment rates to reflect inflation and new evidence on flood damages since 2011 (including people impacts such as mental health)
- a new intermediate risk band for moving properties and other assets between high and medium risk to help manage surface water flood risk - meaning more surface water schemes are likely to receive Defra grants in the future
- improved payment rates to better capture the wider environmental benefits
achieved by some flood schemes and encourage environmentally beneficial design
• recognition of the benefits for properties that will become at risk in the lifetime of flood defences due to the impacts of climate change.

23. The new guidance includes updated:
• operational principles on how government grant will be invested
• partnership funding calculator and associated guidance
• guidance on maximising environmental outcomes

24. There may be further changes in the future and, later this year, Defra will launch a public consultation on floods funding policy to gather views and experience from across the country. More information on the consultation and details of how to take part will be made available in due course.

Natural Flood Management

25. Colleagues will be interested to know that Defra has published a report on ‘The Enablers and Barriers to the Delivery of Natural Flood Management Projects’.

26. The report highlights findings about the delivery of Natural Flood Management (NFM) projects, in particular those elements that act as a barrier and those that enable such projects. It presents research findings from a literature review, stakeholder engagements, a legal analysis and case study findings. The role of stakeholders is explored along with the identification of cultural, institutional and social barriers and enablers to NFM and possible improvements to NFM delivery.

Surface Water Flooding

27. Colleagues will be interested in the emerging lessons from the review of surface water management. These include:
• surface water flooding is not seen by residents as separate from other forms of flooding and, therefore, it is sensible that it should be considered alongside other flooding sources
• currently, responsibility can appear blurred between water companies, LLFAs, Highway authorities, EA and IDBs. Additionally, riparian responsibilities are difficult to enforce.

28. YRFCC members have contributed to the work and, once complete, I suggest that we take it as a substantive item on a future agenda.

New FCERM Strategy

29. The proposed new national FCERM strategy has been discussed on a number of occasions over the last eighteen months. Last summer, over 400 external responses to the draft strategy were received. The overwhelming majority voiced strong endorsement for the strategy’s ambitions, objectives and measures. The three key ambitions capture the essence of the proposed strategy:
• Climate resilient places
• Today’s growth and infrastructure resilient in tomorrow’s climate
• A nation ready to respond and adapt to flooding and coastal change
30. Although delayed, initially by the General Election and now by the pandemic, the new strategy is in the final stages of obtaining ministerial approval. It will then be laid in Parliament, at which point it becomes a public document. EA colleagues will then work with partners to produce an action plan setting out how the delivery of the shorter-term measures set out in the strategy will be achieved. The intention is to publish the action plan before the end of 2020.

Impact of Covid-19

31. Unsurprisingly, many colleagues have been asking about the impact of Covid-19 on the current six-year programme spend and output targets. The same questions are being asked by Local Enterprise Partnerships in relation to Growth Deal and ESIF funding streams, both of which share the same March 2021 end date.

32. The EA’s national Programme Management Office is supporting the Covid-19 Strategic Risk Action relating to the risk of contractors/suppliers affected by resourcing and supply chain difficulties. This covers both the capital and revenue maintenance programme and they are working with Area teams and supply partners to understand what the Government’s advice regarding construction sites means for individual schemes and the wider programme.

33. Clearly, Covid-19 could impact significantly on the scheduled delivery of the 300,000 homes target and the EA is doing its best to proceed with schemes and operate as ‘business as usual’ as far as practicable to ensure as many homes as possible are better protected in advance of next winter. At the same time, it is important to follow Government and public health advice throughout to maintain the safety of all staff, partners and contractors. From the Committee’s perspective, we will no doubt wish to endorse this approach in the belief that the schemes that we are supporting, and the protection we want to put in place, remain important irrespective of the timescale.

Local Scene

34. Inevitably, this is a shorter section than usual because the main local event – the February flooding - has already been outlined.

35. However, it is especially good to be able to note that one of the last actual (as opposed to virtual) events that I was able to attend was the ceremony to mark the official completion of the Scarborough Spa Cliff Stabilisation project. Aided by splendid spring weather, it was tremendous to see the outcome of this very important scheme. It was especially good to hear the warm thanks being expressed to our colleague Stewart Rowe who has nurtured this complex project to successful fruition. I certainly want to add my own thanks, not least for the skilled way in which he has secured support across a number of funders. To that end, whilst the FCERM aspect has been done, over the next couple of years an associated Heritage Lottery Fund grant will enable the adjacent gardens to be restored as one of the town’s many visitor attractions.

36. It is coincidental that the occasion was also the first formal event for our new YRFC member, Professor Roger Falconer. Roger, who has recently moved back to Yorkshire, has a longstanding interest in flood and coastal issues, both in a professional capacity as a distinguished chartered engineer and in a policy sense as a member of various governmental agencies in Wales where he
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worked until recently and as a specialist advisor and commentator. I am sure that you will join with me in welcoming him to the Committee.

37. Finally, I very much hope that it will not be too long before we are all meeting again in person rather than doing so remotely. In the meantime, I am sure that we will all continue to do everything possible, whilst working safely, to maintain our commitment of 67,000 homes better protected in our region. And, with the next six-year programme now secured, we can then bring fresh energy to put that new and even more ambitious programme in place. However long the pandemic lasts, flood and coastal issues, and climate change more generally, will not have reduced when we eventually emerge from it. Please stay safe.

Colin Mellors
April 2020
Incident management

1. Winter 2019/20 flooding and recovery

February 2020 was the wettest February in the UK since records began in 1862 (Met Office, 2020). England received an average of 154.9mm of rainfall. This is 258% above the average amount for February between 1981 and 2010. It has also been the 5th wettest of any calendar month since 1862.

Between November 2019 and the end of February 2020 a total of 4,630 properties have been reported as flooded. We estimate that our flood risk management schemes have protected 128,100 properties in the same period.

19 severe flood warnings were issued by the Environment Agency during February 2020. 16 of these were issued in a single week from 15 to 20 February. Over the last week months we have seen Flood Warnings and/or Severe Flood Warnings in force for 136 days.

For the 3 storms that occurred during February 2020, peak river levels were the highest or second highest on record on the following 13 rivers: Aire, Calder, Colne, Holme, Nidd, Ribble, Severn, Teme, Trent, Tyne, Ure, Wharf, and Wye.

Whilst we have seen further flooding during March, we have started to inspect all flood risk management assets affected by flooding from Storms Ciara and Dennis to identify any damage. These inspections will help prioritise our asset repair programme across the country to repair Environment Agency defences as quickly as possible, to support communities and help the environment recover.

Since 17 February we have completed over 11,000 inspections of flood risk assets in affected areas, looking for damage, obstructions and any issues that can increase flood risk. Our target is to complete inspections within 3 weeks from when it is safe to inspect assets. We are planning urgent repairs where it is safe to do so and water levels are low enough.

The temporary defences in Bewdley and Ironbridge have been repaired and operated effectively protecting properties from flooding over the weekend of the 7 and 8 March.

We are also working with local partners and communities in all impacted areas. We have had community information officers in all affected communities and have attended public meetings with partners with more scheduled.

www.environment-agency.gov.uk
Planning for the future

1. Our next Long Term Investment Scenarios
The long-term investment scenarios (LTIS) are an economic assessment showing what future flood and coastal erosion risk management (FCERM) could look like over the next 50 years in England. LTIS 2019 brings together our latest understanding of the future scenarios. It’s based on the LTIS 2014 report and includes new analysis carried out in 2018 and helps inform decisions on how we manage flood and coastal erosion risk.

The draft National FCERM Strategy commits the Environment Agency to produce a new set of long-term investment scenarios by 2025 to inform future policy and investment choices for delivering flood and coastal resilience. This will update and improve the future investment evidence that will be used by Defra, HM Treasury, National Infrastructure Commission, Adaptation Sub-Committee, Flood Re and many others.

The Environment Agency is starting to develop the scope and approach for the next LTIS analysis. If you’d like more information or to be involved please contact Mike Steel.

Contact: mike.steel@environment-agency.gov.uk

2. New National Flood Risk Assessment
Our current assessment considers only flooding from rivers and the sea, but, in the future, we will use a wider range of flood risk information. In 2024, the first version of the New National Flood Risk Assessment will also include surface water flooding. Flooding from drainage/sewers and groundwater are in our vision for future versions, beyond 2024.

Benefits for our external users

- Efficiency savings by providing a single, richer, national dataset source for all model outputs, suitable for use at a local / property scale
- Effectiveness and efficiency savings due to improved data robustness and trust, resulting in fewer data challenges
- Effectiveness and risk reduction savings through improved information for decision making during a flood incident, enabled by responses to ad hoc questions
- Better strategic decision making for national investment programmes

How will the New National Flood Risk Assessment work?
The Simulation Library is a database of modelled results built on our local detailed modelling, supplemented with national modelling. It can be interrogated using the Processing Toolkit to extract existing data or create new flood risk information to answer a variety of our business questions.
Want to find out more?
If you would like to receive updates about the project directly to your inbox, please register with us. We would also like to invite flood risk data and information users to join our External User Advisory Group to help shape, review and test the products. Your participation in this group will be key to helping us produce improved flood risk information for the public and create a shared understanding of flood risk across our organisations.

We will share the group’s Terms of Reference (including time commitment) nearer contract award in April 2020, but would like interested volunteers to register with us before then.

To receive updates or join the group, please forward your details to: FCRM_Risk_Assessment@environment-agency.gov.uk.

3. Investing now for the future of FCERM – updating partnership funding rules
Proposals to update and improve partnership funding rules were submitted for approval by the Minister in November 2019. The new rules were then included in the funding bid submitted to HM Treasury for the 11 March 2020 budget. We have continued planning to use these new rules for the annual programme refresh, where all Risk Management Authorities will update existing projects and submit new ones for delivery in the next investment period from 2021 onwards.

Subject to the budget outcome, we plan to publish a new Partnership Funding Calculator, accompanied by new guidance, on GOV.UK. A series of training and awareness sessions will be scheduled for around that time complementing other guidance associated with the programme refresh. The guidance will include applying the updated rules to new projects as well as giving projects already in development the opportunity to review the benefits they expect to achieve, and the grant they may be eligible for. This is initially an interim arrangement pending a wider Defra consultation on their Funding Policy expected in the spring.

Contact: Peter.Clarke@environment-agency.gov.uk

4. Changes to assurance and approval of Environment Agency business cases
We have updated our Integrated Assurance and Approval Strategy (IAAS) that explains how we plan, coordinate and carry out assurance and approval of Environment Agency led FCERM capital schemes. This covers all steps from identifying a project or programme thorough to the realisation of benefits. Its purpose is to inform those managing and delivering projects and programmes of work about the level of assurance and approval required.

The updated strategy introduces 3 changes for FCERM capital projects:
Appendix 1

1. The National Project Assurance Service or the Large Projects Review Group is required to assure the Outline Business Case (OBC) stage of a project.

2. A Strategic Outline Case (SOC) does not need to be assured by the above if the objective is to develop an OBC and the development cost is less than £250k.

3. The Risk Potential Assessment is now only mandatory for projects outside our financial delegation of £100m. Projects within our delegation are required to undertake a Starting Gate risk assessment using the Project Start Risk Potential.

These changes apply to new Strategic Outline Cases from 02/01/20 and Outline Business Cases from 01/04/20.

Contact: largeprojectsreviewgroup@environment-agency.gov.uk

5. Digital Asset Data and Information (DADI)

The Environment Agency is transforming how it manages its assets through the Creating Asset Management Capacity (CAMC) programme. The Digital Asset Data and Information (DADI) initiative forms the overarching digital element of this programme and is implementing ways of using data to learn, adapt and execute tasks by machines “smartly” in order to solve problems. It comprises a range of projects that will develop structure and standards, improve the quality, quantity and open availability of our data and build our capability to prepare for more digital working in the future.

DADI builds upon, matures and enhances the implementation of Building Information Modelling (BIM) Level 2. There are currently 6 live projects ranging in size, complexity and progress, with others in the pipeline. These include:

- The **Data Requirements Library** which is now live on the open data platform and delivers digital access to asset data specifications for new assets in a format that both humans and machines can read. It overcomes the current problem of supply chain partners having easy access to this detail, which is essential to improving data quality within asset management.

- The **CAD and Object Standards project** which will deliver a set of standards to be implemented and enforced on all 2D drawings and 3D models produced for the Environment Agency from May 2020. The standards will promote digital adoption, uptake use and reuse of information and enable consistency in how information is delivered and used across our frameworks, reducing re-work, errors and saving money.

Further information on DADI can be found in our video.

Contact: Alan.Proctor01@environment-agency.gov.uk

Working with others
1. Ofwat Price Review 2019 determinations

Ofwat recently published its Price Review 2019 (PR19) final determinations on water companies’ plans for the period 2020-25.

The spending package over the next 5 years comes to £51 billion. Of this total, £13 billion has been allocated to improve water company environmental performance and resilience and to tackle the challenges to the environment from population growth and climate change. Water and sewerage companies are responsible for managing the risks of flooding from surface water and foul or combined sewer systems.

Water companies have been directed to:
- cut leakage by 16%
- deliver the £4.6 billion Water Industry National Environment Programme (WINEP) programme
- invest over £1 billion to protect communities at risk of flooding
- reduce pollution into rivers and streams by almost a third
- prepare for drier weather utilising £450 million to explore new water resources options

You can read more about it on the Ofwat website and in the statement from our Chair, Emma Howard Boyd.

2. Shoreline Management Plan refresh

We have been working with coastal authorities on a technical refresh of Shoreline Management Plans (SMPs). During November and December 2019 alongside our consultants, Jacobs, we met with local groups who oversee the updating and delivery of the 20 SMPs. By the end of June 2020, Jacobs will have updated guidance on a number of aspects such as climate change and spatial planning, as well as undertaken a ‘health check’ on all 20 SMPs.

After June Coastal Groups will undertake a review of the updated evidence, advice within the new guidance and the health check documents to identify which SMP policies are likely to need to be changed. This will be the first time that many SMP policies have been reviewed since the plans publication in 2006-2012.

We are leading and funding this £1m project as part of our coastal strategic oversight role to ensure that SMPs are fit for purpose and implemented effectively. Alongside the refresh we are developing an on-line digital tool to improve access and usability of SMPs. The North West SMP is being used as a prototype for the new digital tool and will be shared with other coastal groups for testing before the end of March. The aim will be to have all 20 SMPs accessible in a map based digital format by March 2021.

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3. Changes to managing local flood risk – de-maining pilots completed

We have completed the de-maining pilots at South Forty Foot, Isle of Axholme and Stour Marshes. The pilots tested the approach to transferring watercourses and assets to IDBs and local authorities.

The pilots looked at whether we could enable local organisations to take on more responsibility for river maintenance. We developed the proposals with IDBs and local authorities then consulted on proposals to transfer the management of flood risk to IDBs in a number of pilot locations.

13 acres of land were sold on the open market. We also successfully transferred:
- 63.8 km of watercourse to the 3 IDBs
- 28 assets
- 178 acres of land

The Environment Agency has carried out an evaluation of the de-maining process to:
- influence our business decision on how we implement future de-maining within the context of our future approach to maintenance prioritisation
- identify opportunities to streamline the de-maining process while fulfilling our statutory requirements
- identify any policy or legislative changes that are needed to enable future de-maining
Appendix 1

The evaluation has enabled us to review and streamline the process and highlight areas of improvement. These include the process to update the main river variation, including improved internal guidance and developing proposals to simplify the consultation process.

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4. Property Flood Resilience

On 10 February 2020 a Property Flood Resilience (PFR) Code of Practice (CoP) was launched with the ambition to raise the national standards of PFR. The CoP provides a structure and process for PFR that can improve the resilience of properties. If PFR is deployed with greater consistency, this will give confidence to property owners and their insurers.

The CoP will give industry and consumers a comprehensive guide to the specification and installation of PFR. It will also provide some minimal requirements that will create a new benchmark for PFR.

The PFR CoP was one of the key actions in the Roundtable action plan (Standards, Certification and Skills) published in September 2016. The CoP has been developed with input from a broad group of industry stakeholders using the best practice and learning over recent years on PFR installations. The project was funded by Aviva, the Environment Agency, Welsh Government, the Department for Infrastructure and Scottish Government.

A new e-publication on PFR was published in 2019. The Environment Agency worked in partnership with Mary Dhonau OBE to develop the ‘Emag’. It brings together case studies of homes, business and flood groups that have installed PFR to help recover more quickly after a flood. The Environment Agency has recently commissioned a 2nd edition that will illustrate how the PFR installations have performed following recent flooding.

One example in the Emag is The Book Case book shop in Hebden Bridge (see photo to the right) which featured on BBC News in February 2020. The external flood barrier doubles up as the shop signage and can be lowered down.

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Our Work Across Yorkshire

Yorkshire FCRM Programme
Update – April 2020

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Leeds City Council are leading on the second phase of the Leeds Flood Alleviation Scheme in partnership with the Environment Agency, which addresses flood risk from the River Aire. Phase 1 and Phase 2 reduce flood risk to thousands of residential and commercial properties, as well as supporting sustainable growth in the city. Phase 1 was completed in 2017 at a cost of £50m and provides a 1% Annual Exceedance Probability (AEP) standard of protection to the city centre downstream of the train station.

Phase 2 is ongoing and has been split into two steps to aid delivery, figure 1 shows the spatial extent of the scheme. Step 1 started on site in 2019, less than four years after the devastating 2015 Boxing Day floods. It will provide a 1% AEP standard of protection upstream of the train station at a cost of £85m through raised defences. It also includes a large Natural Flood Management Programme, focused in the Upper Aire, see figure 2.

Step 2, involves the construction of a large flood storage area on the River Aire upstream of Leeds, which will uplift the Phase 1 and Phase 2 schemes to a 0.5% AEP standard of protection. The additional cost of step 2 is £25m, which is currently not fully funded. Leeds City Council are in discussions with Floods Minister and Secretary of State around closing the funding gap. The overall cost of Phase 2 is over £100m, which means it is defined as a Major Project and requires HM Treasury sign off. The scheme is looking to set an exemplar approach, and is following the CEEQUAL methodology for sustainable construction.
Key updates this quarter:

- The official opening event to mark the start of construction took place in January, construction is due to finish in early 2023. See Figure 3 and 4 below.

- Step 1 has secured £1.7m of ESIF funding.

- The Full Business Case for Phase 2, including Step 2 has been reviewed by the EA’s Large Project Review Group, and has gained their support to be taken to the Floods Minister and Secretary of State for consideration for additional funding to close the funding gap.

- The Project Board agreed to commit to Carbon reduction targets of:
  - A target of a **20%** reduction in A1-3 (embodied / material) emissions.
    - Major carbon hotspots include in-situ cement and steel piles; the use of low-carbon alternatives for these elements will likely be major drivers in reaching this target.
  - A target of **10%** reduction target for A5 (construction activity) emissions.
    - The scope for this target includes electricity from the site compound, gas oil, and diesel used by construction plant.
Figure 3: Official start on site event

Figure 4: Ongoing flood wall construction work in the Kirkstall Road area
Leeds Flood Alleviation Scheme Natural Flood Management Programme

The Leeds FAS NFM Project will be delivered between 2018 and 2025; but the wide ranging benefits of the scheme will be realised from 2039 to 2069. This project plans to build greater climate resilience within the River Aire catchment in the face of the current Climate Emergency. With the aim to reduce peak flow in the River Aire from a 1 in 200 flood event (0.5% AEP) to help protect Leeds, in any given year. This is to complement engineering solutions currently being built by Leeds City Council, and take account of the anticipated climate uplift in river levels.

The project study area covers 687km2 of the River Aire catchment, and flows through a number of large towns and cities including Skipton, Keighley and Bradford. Delivering Natural Flood Management at this scale is unprecedented in the United Kingdom.

A number of pilot sites were completed between 2018 and 2020 to test a variety of NFM measures. Unfortunately due to Covid-19 some of the works were curtailed at the end of the 2019/2020 planting season. However, over the last 2 years, the following works have been completed at 13 different sites:

- 4,360 trees planted
- 500m hedgerow planted
- 10 Wetland Scrapes
- 116 leaky barriers
- 250m2 buffer strip
Appendix 2

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- 800m of fencing and 8 field gates
- 1ha of soil aeration

The pilot sites had their first test this winter, when Storms Ciara and Dennis passed over the River Aire Catchment. One of our landowners, from our pilot site at Earby, Marfield Farm, managed to record the measures in action. https://www.youtube.com/watch?v=1yK9gnNzIoM

![Figure 2 Fencing completed on site near Airton, unfortunately tree planting delayed until autumn 2020 due to Covid-19.](image)

The pilot sites were an opportunity to test the delivery of a range of different Natural Flood Management Measures and delivery mechanisms. We have worked with a number of partners to deliver sites on their land, including City Of Bradford Metropolitan District Council and the National Trust. We are seeking further opportunities with other partners within the catchment for the future delivery of sites. We are currently working with Leeds University to develop and deliver NFM measures at the Brownlee Triathlon Centre; as well as delivery of measures on their land, we are seeking opportunities to work with academics and researchers at the University to measure and monitor the effectiveness of the programme.
Covid-19 restrictions have temporarily put a stop to works on site. However, the project team are continuing to plan and develop the scheme to meet the ambitious targets set. In March 2020, the project was awarded £700k of funding from the Northern Forest Partnership Innovation Fund to deliver over 300k trees by March 2022. To meet this programme, the project had intended to award a contract to the White Rose Forest to undertake landowner engagement in the River Aire Catchment. This contract is currently being revised to take account of restrictions around travel and physical distancing. It is hoped that we can use the current period for online training and marketing, with an ambition to be engaging with landowners in autumn 2020.

To enable efficient and effective discussions with landowners, the project team are currently building a GIS Platform. This short video summarises just some of the GIS tools that are currently under development, including interactive mapping, design aids and dashboards which will be used to manage project information [https://sway.office.com/77EhCuD3HW05U8Xh?ref=Link](https://sway.office.com/77EhCuD3HW05U8Xh?ref=Link). We are working with partners to identify and unlock access to data sets, which will enable the project to maximise opportunities to deliver Natural Flood Management. Notably the project team are currently working with the Geospatial Commission to gain access to buried services information from private providers. It is hoped that this information can be used to screen out sites, that could be affected by underground assets; and also, manage health and safety onsite, including the automation of much of the pre-construction information.

The project continues to generate media interest, and the public have largely provided positive feedback to the ambitions of the programme. Recently, Rachel Reeves, the MP for Leeds West, came to learn more at our pilot site at Harden Moor.
The project still has a funding shortfall, only £4.7m funding has been secured, the target for the project is £8.1m. However, a business case is being developed for funding from WYCA. Additional funding opportunities are being identified, including the Woodlands Trust. In addition, the project team are working closely with DEFRA partners (Natural England and Forestry Commission) to establish a clear process that will enable landowners in the River Aire Catchment to be sign posted to existing grants and funding streams (i.e. carbon) to maximise Natural Flood Management benefits.

Whereby landowners do not want to deliver works themselves, the project team will have contractors that can deliver works on behalf of the project. It is likely that this framework for delivery will be procured in summer 2020.
The Wyke Beck Valley programme aims to provide enhanced flood risk management in East Leeds and at the same time provide enriched green spaces for the communities along the valley.

In February 2020 Storm Ciara and Storm Dennis brought heavy rain across the country, with the Met Office confirming that February 2020 was the wettest February on record. On Sunday 9 February alone, rain gauges recorded 45mm of rain in the Wyke Beck Catchment.

**Works recommence at Killingbeck Fields**

Works at Killingbeck Fields have resumed this month after heavy rain and soft ground led to a temporary pause on works.

Contractors were back on site in mid-February, with the view to complete the scheme in full by August 2020, subject to further weather conditions.

**Upcoming Works**

Sheet Piling work to create the watertight barrier in the embankment will take place in mid-March and will take approximately 3 weeks to complete.

Once these works have taken place, residents in Denbigh Heights and Denbigh Croft will directly benefit from reduced flood risk.
Indicative illustration of the completed works with permanent ponds and improved landscaping.

Indicative illustration of the completed works when the flood storage area is holding water and reducing the risk of flooding to the Dunhills community.
On 3rd March 2020 the Environment Agency’s Chair, Emma Howard Boyd, attended the opening of the £16m Scarborough Spa Slope Stabilisation Scheme. This project, led by Scarborough Borough Council and delivered by Balfour Beatty and Royal Haskoning protects 380 homes, businesses and the grade ii listed Spa building from coastal erosion driven slope instability.

Work on the scheme started at the end of May 2018 and has taken 20 months to complete, during which time 4585 soil reinforcement nails have been drilled into the cliff, 225 steel piles installed, 3600 tonnes of topsoil placed, 1000 tonnes of tarmac used for footpaths and 11 community causes supported by Balfour Beatty.

Funded by £11.6m GiA, with significant contributions from Scarborough Borough Council and North Yorkshire County Council, this £16m scheme delivers over £150m of economic benefit, as well as allowing Scarborough Borough Council to successfully attract £5m of Heritage Lottery Funding to enhance the South Cliff Gardens area.

Cllr Janet Jefferson, Cabinet Member for Scarborough Borough Council, said:

“This critical scheme has been an enormous undertaking from concept to completion. I am very proud of what has been achieved to safeguard the future of the cliff and the homes, businesses, infrastructure and much admired heritage assets that rely on its stability.”

“The scheme’s success has been down to the collective efforts of everyone involved, including the local community who have been very supportive and patient during the works. Today we all celebrate the success the partnership has delivered.”
Launch of major 'source to sea' natural flood management drive

The collective ambition of multiple organisations across South Yorkshire to respond to the climate and nature emergency was marked with the first batch of planting of what will be 38,000 trees to better protect homes and businesses across the region from flooding.

The November 2019 floods generated huge support to further develop a catchment-based approach to managing the risk of flooding at a landscape scale along the River Don. By investing in nature based solutions like tree planting, peat restoration and wetland creation, it is possible to help slow the flow of water, reducing flood risk downstream in a way that complements more traditional engineering such as flood defence walls and embankments.

By coming together for the launch of the initiative, partners across the region demonstrated their shared ambitions for collaboration across the catchment, and in doing so, rising to the challenges of the climate and nature emergencies. Councillors and senior staff from organisations across the region including Environment Agency, Sheffield, Doncaster, Barnsley and Rotherham Councils, Sheffield and Rotherham Wildlife Trust, Don Catchment Rivers Trust, Sheffield City Region, the Woodland Trust, Forestry Commission and Moors for the Future were in attendance for the event at Brooks Bank Farm, near Underbank Reservoir, Stocksbridge.

This work supports the wider River Don catchment natural flood management programme which is in its early stages being led in partnership by the Environment Agency and Sheffield City Council to slow and store flood waters using nature-based solutions like tree planting and peat restoration to better protect homes and businesses.
The Environment Agency will be hosting a regional collaborative workshop to bring partners together again soon to build on momentum and follow up on the success of last week’s event. The purpose of this workshop will be to set out our ambition for an integrated nature based solutions programme across the River Don catchment and South Yorkshire Region to manage flood risk and respond to the climate emergency.

South Yorkshire Flood Investment Priority Programme

At a South Yorkshire regional level, Sheffield City Region, working with all the South Yorkshire Authorities and in liaison with the Environment Agency, have submitted a ‘Flood Investment Priority Programme’ in late February to Government requesting them to commit an additional £271m investment across the region to maximise capacity to accelerate priority flood schemes. The programme would reduce flood risk to 2,800 business and over 10,300 homes across South Yorkshire and is estimated would have an impact of over £1.7bn in the direct damages avoided by similar flood events in the future. An important element of this the proposed £6m investment in nature based solutions to help slow the flow across the River Don catchment.

Supporting flood affected communities in South Yorkshire

Following the devastating flooding in South Yorkshire in November 2019, the Environment Agency in partnership with Local Authorities across the region have been holding multi-agency flood drop ins to offer support, advice and information for flood affected communities in Doncaster and Rotherham. Partners who have also supported these events have included NHS, emergency services, social housing providers, Yorkshire Water, Coal Authority and IDB’s which has highlighted a strong joined up approach. All events have all seen a high turnout with follow up engagement planned over the coming year to update on progress, action taken and supporting local community resilience to ensure communities get the support they need following flooding.
The importance of Development Planning & Permitting has never been highlighted more than in the last 6 months. Six months of some of the worst flooding we have seen for over a decade. Thousands of homes flooded but also thousands more protected from flooding.

Planning

A house on Trundle Lane, Fishlake, which the Environment Agency made planning conditions on, did not flood in November 2019. Unfortunately several hundred other houses in Fishlake did, so why was this particular one spared? It was spared the devastating impact of flooding due to the planning system ensuring it was built in a flood resistant and resilient way. The guidance for safe development is based on National and Local guidance such as the National Planning Policy Framework, Local Plans, Strategic Flood Risk Assessments and from our role as a statutory flood risk consultee. The advice from Doncaster Councils SFRA, advice from the Environment Agency and Doncaster’s planning team meant that this house was built sufficiently high enough (5mAOD) that it did not flood. Unfortunately that was not the case for the house next door which flooded very badly as it was built much lower. Properties in Fishlake were inundated with flood water for 10 days and surrounding land for much longer.

The majority of the houses that flooded were built before planning regulations became much stricter due to increasing flood risk and before 2012 when the government stated that any new development proposal should be built in a flood resistant and resilient way so they would not require defending in the more conventional ways (new flood defences etc). This is now reflected in the grant in aid funding rules that any house built after 2012 cannot be included in the outcome measure score (used to claim the funding) as it should not flood therefore not require defending.

Permitting

The role of permitting was also highlighted during the flooding with a particular case in Doncaster at Jubilee Bridge where the applicant wanted to scaffold across the whole bridge in one go. This was the most efficient and cost effective way of carrying out repair works but posed a significant flood risk. Scaffolding across the full width of a river channel can cause extreme restrictions and debris build up and lead to flooding. This was demonstrated during the flooding in 2007 in Sheffield where a pedestrian footbridge had scaffolding across the whole length. The build-up of debris on the scaffolding caused a blockage significant enough to cause the wall on the left side of the bridge to collapse and cause significant flooding.

After several conversations with the applicant and by using the example in Sheffield we were able to reach an agreement that was acceptable in terms of flood risk and only scaffold half of the bridge at a time. During the flooding in November the scaffolding caused no increase in flood risk.
Sheffield Footbridge June 2007

Jubilee Bridge September 2019
Appendix 2

Jubilee Bridge November 2019 – illustrating debris caught on only a section of the bridge rather than its full span.

Post Flooding/Recovery

We are cooperating with investigations (internal and Section 19) into the winter floods to ensure our evidence reflects any changes to our understanding of flood risk. This will ensure we continue to use the best available information in our advice on development matters, and this also includes an extensive recovery programme for which our teams play a crucial role to ensure that work is carried out in a way to reflect flood risk and local environmental matters.

These examples illustrate the important work of the Development Planning and Permitting team and Sustainable Places team in reducing and eliminating the impact of flood risk. We fly under the radar and the work we do is often unseen and not understood but as these examples, of which there are many more, illustrate the work we do is key in keeping our communities safe.
Rotherham Renaissance FAS (RRFAS)

For a number of years, the RMBC and EA partnership have been working to significantly reduce flood risk along the River Don corridor through the Templeborough, Town Centre and Parkgate areas of Rotherham. This is being achieved by constructing the £50m Rotherham Renaissance Flood Alleviation Scheme (RRFAS). £20m of RRFAS has already been constructed. A further £5m is due to be constructed over 2020 and 2021, with works located upstream of the Rotherham United FC stadium (RRFAS2A) and on the Forge Island development site (RRFAS2B) currently progressing well.

Several delivery challenges exist for a scheme such as RRFAS that targets both flood risk reduction to existing property/infrastructure and economic development of key employment areas. Despite this, RRFAS has been able to progress due to two key factors of success:

- A phased approach to scheme delivery
- The Rotherham Regeneration Area Flood Risk Toolkit (in operation since 2011)

Funding of RRFAS requires a range of funding partners and beneficiaries to be brought on board, and funding from different contributors is then pooled together to achieve a multi-agency funded capital scheme.

The challenge is to get the funding timescales from all organisations to align, and to do this requires RRFAS to be sub-divided into smaller phases that can be funded by organisations with compatible drivers and timescales. Therefore, a phased delivery programme is the only practical way to reduce flood risk along the River Don corridor and this approach is what is being pursued by the RMBC/EA partnership.

Having pre-determined flood defence alignments and levels of protection set out within the Flood Risk Toolkit allows RMBC and EA to demonstrate the cumulative reduction in flood risk that the RRFAS scheme will deliver. Being able to refer to this when approaching stakeholder, landowners and potential funding partners means that RMBC are able to identify how by delivering to individual phases of RRFAS, the long term objective of delivering the overall scheme can be achieved. In addition to this, developers have pre-determined levels of protection they must adhere as part of the planning process.

Due to the success of these two key factors and a strong partnership with the EA, RRFAS is progressing well with the current town centre phase expected to be completed in 2022 and future downstream phases being developed, with construction targeted for 2023 to 2025.
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Existing lock gate over topped showing need for Phase 2c canal barrier.

Sheet piling in situ on Forge Island showing the vulnerability of Rotherham central rail station before RRFAS.
The Anlaby and East Ella Flood Alleviation Scheme (AEEFAS) is a project to reduce the risk of surface water flooding to over 4000 residential properties in the Anlaby and East Ella area at a cost of £20m. It was developed by the East Riding of Yorkshire Council in partnership with the Environment Agency, and jointly funded by FDGiA and LGF.

The scheme is the second of the three sister schemes in the area that have been designed using information obtained from extensive flood risk modelling, which was carried out following the devastating floods of 2007. The other schemes being the Willerby and Derringham Flood Alleviation scheme – WADFAS, completed in 2017 and the Cottingham and Orchard Park Flood Alleviation Scheme -COPFAS, detailed below. The construction works for this scheme are being delivered by the East Riding of Yorkshire Council.

The modelling was able to verify that water inundating properties in Anlaby and East Ella had originated in the west of the catchment. In order to catch and attenuate this surface water the scheme links an existing Environment Agency lagoon at Anlaby Common to a new storage lagoon, constructed on the site of the former Sydney Smith School. In addition, a new watercourse and connecting tunnel is being created to capture water from upstream and channel it away from residential areas to the storage lagoons.

There are three phases to this scheme:

**Phase 1** took the form of improvements to the New Marr Bridge over the Western Drain at Beverley Road, Anlaby. This work started in 2016 and was completed in 2018.
Phase 2 included the construction of a new spillway structure alongside the existing EA lagoon and channels to connect this to the new 130,000 m³ lagoon on the site of the old Sydney Smith School. Note that when not storing water, the Sydney Smith Lagoon will be used as sports pitches, meaning there has been no net loss of recreational facilities in the area.

Phase 2 has achieved hydraulic completion, and is already providing a reduction in the risk of flooding to over 430 homes. The contractual completion certificate was issued earlier this year (although there are still some minor seasonal landscaping tasks outstanding).

Phase 3 consisted of the creation of connecting watercourses and infrastructure designed to link the north eastern Tranby catchment in to the two lagoons. This includes the construction of a tunnel 1.5km long and 1.8m in diameter, up to 14m deep, and an energy displacement unit at the outfall of the tunnel.

The site has now remobilised to complete these outstanding tasks, after the stoppages that occurred following the exceptionally wet weather of late 2019 and early 2020. However, the developing situation is being monitored in the light of the COVID-19 outbreak. The overall programme faces some disruption. The pandemic has caused considerable uncertainty in the construction industry as a whole.

The supply chain is affected; many suppliers remain closed and a small number of subcontractors are stopping works and furloughing staff. Nevertheless most sections of the works are continuing and will continue, provided there is support through the supply chain, and assuming that further restrictions to movement are not enacted by the government. Any decisions regarding the ongoing mobilisation of the site, and nature of works undertaken will be taken in line with the latest government advice.

The scheme has a total budget of £20 million, funded by £15 million of Flood Defence Grant in Aid funding and a grant of £5 million from the Humber LEP’s Local Growth Fund. In common with the sister schemes (WADFAS and COPFAS) AEEFAS was constructed to an annual exceedance probability (AEP) of 1.33% and an allowance has been made within this to account for predicted future climate change.
Phase 3 site compound

The Energy Displacement Unit
Kerry Pit Inlet, after the storms of winter 19/20
Appendix 2

Operations in the tunnel shaft

Stormwater flowing in the tunnel following completion
Cottingham and Orchard Park Flood Alleviation Scheme (COPFAS)

Cottingham and Orchard Park Flood Alleviation Scheme (COPFAS) is the third of the three sister schemes to be conceived as a result of the flood and rainfall modelling following the events of 2007. In 2007 the village of Cottingham was flooded, as were parts of Orchard Park in Hull. This surface water scheme will reduce risk to 4000 properties at a cost of £22m.

The computer models showed that the floodwater flowing into Cottingham had originated around the Raywell Valley, and the water which caused damage to Orchard Park had come from the area known as Northmoor, near Dunswell. To counteract this, a series of lagoons and structures designed to capture and temporarily store the water in the event of heavy rainfall was devised.

COPFAS Schematic

COPFAS is constructed in two separate phases.

**Phase 1** consists of improvements to Millhouse Beck and nearby ditches and watercourses, leading to a flow control structure in Creyke Beck. This connects via a siphon to a large lagoon on land at Orchard Park. As the original recreational facilities had to be removed to allow the lagoon to be constructed, the East Riding of Yorkshire Council worked together with Hull City Council to improve community amenities here; refurbishing the open spaces and creating a public fishing pond near the lagoon, which has now been handed back to HCC.
The completion certificate for Phase 1 was issued in summer 2019. This lagoon has a capacity of 148,000m³ and providing a reduction in the risk of flooding to around 1000 homes. Runoff from the recent rainfall events in October/November meant that Orchard Park Lagoon was substantially filled for the first time since completion. This generated positive publicity for this project along with the sister schemes WADFAS and AEEFAS.

Phase 1 was recently the recipient of a prestigious ICE Smeaton Award, for the best scheme in the Yorkshire and Humber area between £500,000 and £5 million.

**Phase 2** Phase 2 is nearing functional completion; three of the lagoons are operational: Green Lane, A164 North and A164 South were awarded a preliminary certificate on the 9th December 2019. A number of the remaining lagoons are also permitted to partially impound water; and as a result COPFAS as a whole is now estimated to be able to attenuate at least 75% of the design volumes.

Work to the remaining lagoons and structures has now recommenced following the exceptionally wet weather in late 2019 and early 2020. However, the developing situation is being monitored in the light of the COVID-19 outbreak. It is important to note there are potential issues with the supply chain for this scheme. In particular, the quarries are currently not operational, and it has proved difficult to obtain regular deliveries of diesel.

In terms of personal safety, construction works are continuing for as long as it is deemed safe to do so. At present the majority of works is being carried out by operatives in enclosed vehicles and plant. Any decisions regarding the ongoing mobilisation of the site, and nature of works undertaken will be taken in line with the latest government advice.

The scheme has a total budget of £22 million, funded by £17 million of Flood Defence Grant in Aid funding and a grant of £5 million from the Humber LEP’s Local Growth Fund. In common with the other similar flood alleviation schemes, COPFAS was constructed to an annual exceedance probability (AEP) of 1.33% and an allowance has been made within this for predicted future climate change. When all phases of the scheme are complete there will be over 4,000 properties at a reduced risk of flooding.
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COPFAS Phase 1: winner of the ICE Y&H Smeaton Award.
Appendix 2

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COPFAS Phase 1 lagoon partially filled during storms of winter 2019/20

Green Lane Lagoon functionally complete (the area has now been seeded)
Appendix 2

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A164 Lagoon functionally complete (the area has now been seeded)

Work continuing on Railway Lagoon, despite wet conditions
Appendix 2

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Operational plant on Railway Lagoon during the winter storms

Completion of the channel at Stackyard Lagoon
Hessle Foreshore Tidal Defence

Hessle Foreshore Tidal Defence (HFTD) is a project to construct a combination of concrete and glass wall defences in the vulnerable area of low lying land between the base of the Humber Bridge and Livingstone Road on the foreshore at Hessle at a cost of £11m. It will reduce risk to 4000 residential and commercial properties when complete.

The wall will connect with existing defences and higher ground at its eastern extent. The project also includes improvements to the sluice structure at Hessle Clough, which will reduce the risk of a tidal surge inundating properties along the Fleet Drain in Hessle itself.

Work by both the Council and the Environment Agency to improve the tidal defences along the length of the Humber Estuary has been ongoing for a number of years. This work assumed a high level of importance following the tidal surge of December 2013. This tidal surge had a devastating effect on the East coast, and was the highest for at least 60 years. At Hessle foreshore the tidal surge affected over 80 homes and businesses, but could have been significantly worse if the weather conditions had been different at the time.

Schematic showing the location and extent of the tidal defences

The work has been divided into three operational stages.
Stage 1 Hessle Clough Sluice Structure involves the raising of the existing wall around Hessle Clough Sluice by approximately 1m to prevent overtopping during a tidal surge event. Work will also include improvements and repairs to the sluice itself.

The contract for Hessle Haven Sluice has been returned and scored, but has not yet been formally awarded; award of the contract will proceed when Network Rail eventually finalise their legal agreement. In order to progress the scheme, a letter of intent to award was issued to the winning contractor, who is proceeding with detailed design and method statements. The contractor has confirmed that they have the resources in place to commence work, and it is expected that this will be late April/early May 2020 depending on the developing situation in respect of the COVID-19 pandemic.

Stage 2 A63 (Clive Sullivan Way). Highways England will work in partnership with the Council to deliver a defence in the form of a concrete wall alongside the A63, which will double as a vehicle restraint barrier for the dual carriageway.

Highways England are continuing with the construction of the concrete barrier along the A63. However, it is uncertain how long this can continue for, in the light of recent government guidance in relation to COVID-19. Highways England are currently considering their position and further updates will be disseminated once they become available. As noted in other scheme updates, there are potential issues with the supply chain, especially basic construction site necessities such as fuel and quarried materials.

Stage 3 Cliff Road involves raising of the road under the Humber Bridge and the construction of a wall along the southern side of Cliff Road. This wall will include flood gates at various points which can be closed during a tidal surge event. The wall will be constructed of glass to preserve the iconic views of the Humber Bridge and estuary. This will be similar to the glass wall constructed in Paull Village to the east of Hull.

The Cliff Road tender returns have been evaluated and scored; the contract is currently in the official standstill period following selection of the preferred contractor. The preferred contractor has confirmed that they have the resources in place to commence the construction work, and are currently planning to be on site in early May 2020 depending on the current COVID19 situation.

Yorkshire Water, Northern Power Grid, KCOM and Northern Gas Network have mostly completed the diversions of their apparatus. The contractors are still working, having taken the appropriate precautions regarding social distancing and any outstanding works will be completed before the commencement on site of the main works.

The scheme has a total budget of £11 million, funded by £7 million of Flood defence Grant in Aid funding, a grant of £2 million from the Humber LEP’s Local Growth Fund, and a grant of £2 million from the European Structural and Investment Funds. The tidal defence scheme will be constructed to a 0.5%AEP and an allowance has been made within this for climate change. By March 2021 when all phases of the scheme are complete it will reduce the risk of flooding to over 4000 homes and businesses in the area.
Highways England Site on the A63 looking from Hessle Haven
Pocklington town centre is built around the beck which has historically been vulnerable to flash flooding. It was badly hit in 2007, twice more in 2012 and then again on Boxing Day 2015 when homes and businesses were damaged. In response to these events, and to reduce the long term risk of flooding, Pocklington Flood Alleviation Scheme, (PockFAS) at a cost of £5m was conceived.

Diagram showing the bund structure and water storage area

The source of Pocklington Beck, Main River, is high in the Wolds to the north east of the town and has a relatively large catchment. Culverted through the town centre, in the event of heavy rain flows exceed capacity leading to flooding in the commercial area of the town.

To reduce the risk of floodwater reaching the town, a large dam has been constructed which spans the beck. Within the structure is a flow control device – a Hydroslide. In the event of heavy rain, the water will be held back in the lagoon and slowly released after the threat of flooding has passed. The scheme has been tested twice already with the lagoon partially filling in the heavy rainfall experienced in November 2019 and again in February 2020.

The scheme has a total budget of just under £5 million, funded by £0.5 million from the York, North Yorkshire and East Riding LEP’s Local Growth Fund and £3million from a local property developer Persimmon Homes. This funding was provided through a section106 Agreement following the allocation of POC-C for housing (207 properties).
As of 1st April 2020, council tax records show that 55 properties have legally completed and are occupied, and the site has created 71 full time jobs. The FAS construction site has employed 135 separate individuals, and created the FTE equivalent of 13 jobs.

The Council has covered the upfront costs of the scheme and the developer is in the process of releasing 10 staged payments based on housing completion targets. In addition the project received a grant of £0.9 million of the Environment Agency's Grant in Aid funding and also had an initial allocation of £440,000 from the Local Levy for contingency funds, of which £44,000 was required.

PockFAS was constructed to an annual exceedance probability (AEP) 1.33% and an allowance has been made within this for climate change. Work is now complete and the scheme is operational, reducing the risk of flooding to over 130 homes and businesses in the area.
Appendix 2

Item No: 4.1

PockFAS in operation winter 19/20, view from the bund looking downstream

PockFAS in operation winter 19/20, Debris on the trash screens
The hydroslide in operation, winter 2019/20
As noted in the covering Committee Secretary’s letter, please note that since the Committee is meeting remotely and informally, therefore members are asked to indicate whether they would be minded to support the recommendations of this paper.

**EXECUTIVE SUMMARY**

**PURPOSE:**

To note the considerations, and approve recommendations (in **bold** type), arising from the Programming and Investment Sub-Group meeting held on 26th March 2020. Papers discussed at the P&I Sub-Group referred to in this paper are provided in the separate Technical Appendix as A01 to A09.

**KEY HIGHLIGHTS:**

1. Our baseline financial position for 2019/20 shows an affordable investment of £137.5m across all funding schemes. Our forecast is for £119m.

2. The investment of £110m in 2019/20 will deliver just over 19,556 properties better protected from flooding or coastal erosion and create or improve 41Ha of biodiversity habitat.

3. The top 10 projects in terms of OM delivery from 2019/20 to 2020/21 deliver over 40,000 of the remaining 42,000 to be delivered. We have high confidence of delivering 9 out of the 10 projects with 1 project, Filey, having a lower confidence. An explanation of the confidence rating for Filey is provided in the paper.

4. The programme shows a strong economic return on the investment from schemes delivering outcome measures. The present value of benefit for schemes delivering in the current investment period is over £5 billion.

5. Our position for asset condition in high consequence systems as at 17th March 2020 was 94.3% and 90.0% against targets of 97.0% and 90.9% for EA and Third party maintained assets respectively. However this does not take into account the effects of the recent flooding.

6. We continue to progress on our efficiency target with £3.62m of efficiencies accepted by Q3, and a further £2.2m already accepted for Q4. This remains a challenging target.

7. The budget provided an allocation of £5.2bn of capital funding from April 2021 to March 2027, together with further specific measures as set out in section 8 of the paper.
8. We reviewed the Local Levy programme in detail and noted that, following the Committee’s approval of in-year additions to the Levy programme in January 2020, the programmed value of work for 2019/20 was just under £3m.

9. As at the end of February 2020, just under £1.6 million has been spent, with a full year forecast of over £2.6 million. Due to the complexities of apportioning spend between funding sources these figures are indicative. Almost £850,000 of the remaining spend is dependent upon claims being made by other RMAs and we have been able to establish that claims have been submitted for over £800,000 of these.

10. We received a request to reallocate funding in 2019/20 for one project and have eight requests to re-profile funding allocations from 2019/20 into 2020/21 with a total value of £217,000.

11. We considered an update on the funding strategy for the Earby FAS (Phase 2) project ahead of a likely request for the next meeting.

12. We reviewed five new Levy requests totalling £343,000 for 2020/21. As detailed in Technical Appendices A07.

13. We received reports from the Sub-Regional Partnership Meetings.

RECOMMENDATIONS:

1. Approve the reallocation of £2,500 Levy for the Dearne Valley initial assessment;

2. Approve the re-profiling of allocations between 2019/20 and 2020/21;

3. Approve the 2019/20 Local Levy programme as detailed in Technical Appendix A06 (Local Levy for Approval).

4. Approve the future year’s indicative Local Levy profile for projects in the current programme as detailed in Technical Appendix A06.

5. Support an allocation of Levy to the Earby FAS (Phase 2) at its July 2020 meeting in principle, subject to Lancashire County Council providing a more proportionate contribution.

6. Approve allocations of Local Levy for 2020/21:

   a. Allocate £200,000 to the Robin Hood's Bay Seawall capital maintenance scheme (Line 1, Technical Appendix A07) on the understanding that £64,000 of this is underwriting Scarborough Borough Council until such time as they are able to approve an additional contribution.

   b. Allocate £35,000 to the Wilder Waterways in the Lower Don (WiLD) project (Line 3, Technical Appendix A07).

   c. Allocate £60,000 to Reid Park Beck, Horbury, Wakefield (Line 4, Technical Appendix A07).

   d. Allocate £18,000 to the SME Indirect Costs and Flood Risk project (Line 5, Technical Appendix A07).
1. **INTRODUCTION AND WELCOME**

1.1 The Chair welcomed all who were able to dial-in, since this was a ‘virtual’ meeting and introductions were made.

1.2 The YRFCC’s Programming and Investment Sub-Group met on 26th March 2020 to consider a number of issues as listed in the summary above.

1.3 The following were present at the meeting:

- **YRFCC:** Colin Mellors
- **LLFAs Elected Members:** Councillors: Jane Scullion (Calderdale Council), David Jeffels (North Yorkshire County Council), and Andrew Waller (City of York Council).
- **EA Independent Members:** Roger Falconer, Jeremy Walker
- **LLFA Officers:** Neil Fearnley, Rachel Glossop, Ben Kirkby and Paul Maddison.

1.4 Apologies for absence were received from:

- **LLFA Elected Members:** Chris McGuiness (Doncaster), Cllrs Chris Matthews (East Riding of Yorkshire Council) Mike Thompson (Hull City Council)
- **EA Independent Members and Officers:** N/A
- **LLFA Officers:** Astrid Paget, Steve Wragg
- **EA Officers:** Adrian Gill

2. **EA VERBAL UPDATE**

2.1 This item began with a discussion on the effects of Covid-19 outbreak and lockdown. It was noted that guidance about how consequent delays, especially where this took projects into the next financial period, was awaited. It was hoped that whatever work could be undertaken remotely would continue so that projects could be re-started quickly when normal working resumed.

2.2 Neil Longden indicated that the outbreak had caused the EA some challenges due to staff working from home, supporting those who are ill or self-isolating. Network demands are likely to cause some delays to everyday tasks but, where resources allow, work will continue, albeit at a slower pace.

2.3 Members were pleased to note the government’s recognition of the importance of FCERM by the announcement in the Budget of an increased investment over the next six-year programme to £5.2 billion. The new six-year programme aims to better protect 336,000 properties, noting the key distinction from ‘homes’ to ‘properties’.

2.4 Neil updated members on the February storms. The EA incident room was open for 6 weeks responding to the storms and significant pumping capacity had been deployed which had been very helpful. Members expressed sympathy with all those affected whilst noting that many others had been protected by previous investments in schemes. There had also been useful learning from the 2015 event. Neil informed members that the EA,
alongside Wakefield and Calderdale Council, a Section 19 report is being produced for the Flooding in February.

2.5 Members thanked all those involved for all their tremendous work during the February incidents and their sympathies to those whose homes and businesses had been impacted.

3. PROGRAMME OVERVIEW

3.1 Bill Rodham presented a paper on the performance of the Yorkshire flood and coastal risk management programme for 2019/20 and beyond. The paper is reproduced below and the accompanying appendices presented to the P&I Sub-Group are provided as Technical Appendices A01 to A04.

3.2 Baseline and Forecast Position for 2019/20

3.2.1 In May, we establish our baseline position for the new financial year. This provides an opportunity to take account of the outturn position for the previous year and make an objective assessment of funding needs for the year ahead. The pie chart at figure 1 shows the distribution of funding for our baseline position across all funding streams based on the May data.

3.2.2 Figure 2 below shows the baseline position across all funding streams as a line graph. The May baseline was set at £140.9m against an affordable programme of £137.5m across all funding sources. The February forecast is £118.7m which if achieved will be another record year of investment. The main reason for the reduction in forecast of overall expenditure is a combination of the ability to spend partnership funding contributions being over-optimistic in May and the funding splits not fully taking account of project slippage from last financial year. The reduction in expenditure since May is made up of £16m of contributions, £0.9m of Local Levy and £5.2m of GiA. We have therefore been able to maintain our GiA spend as can be seen in figure 3 below, enabling us to ease the pressure on GiA in 2021 by making use of contributions later in the programme.
The most significant changes from May are shown in Table 1 below.

### Table 1: Top 10 Variances from May Baseline

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Total Fcst Variance from May baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leeds FAS Phase 2</td>
<td>-5,283</td>
</tr>
<tr>
<td>Holderness Drain FAS</td>
<td>-4,239</td>
</tr>
<tr>
<td>Hessle Foreshore Tidal Defences (HeFTD)</td>
<td>-2,445</td>
</tr>
<tr>
<td>Foss Barrier Recovery Scheme</td>
<td>-2,404</td>
</tr>
<tr>
<td>Filey Flood Alleviation Works</td>
<td>-2,289</td>
</tr>
<tr>
<td>Whitby Harbour Works MU17 &amp; MU18</td>
<td>-2,068</td>
</tr>
<tr>
<td>York FAS - Clementhorpe (Cell B8)</td>
<td>-1,628</td>
</tr>
<tr>
<td>York Flood Defence Improvements (Ouse &amp; Foss)</td>
<td>-1,619</td>
</tr>
<tr>
<td>Humber: Hull frontage</td>
<td>-1,396</td>
</tr>
<tr>
<td>Hempholme and Wilfholme Pumping Station Refurb and Ownership Transfer</td>
<td>-1,164</td>
</tr>
<tr>
<td><strong>Top 10 Total</strong></td>
<td><strong>-24,534</strong></td>
</tr>
<tr>
<td><strong>Other Schemes outside of the top 10</strong></td>
<td><strong>2,338</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>-22,196</strong></td>
</tr>
</tbody>
</table>

3.2.3 Figure 3 below sets out the position for FCRM Grant in Aid where the forecast is £96m against the May baseline of £101.3m and an affordable budget of £93.7m. This provides an over-programme of 2.5% which is an acceptable in the national context. We have identified a number of opportunities with the help of the other risk management authorities to increase our grant in aid to strengthen the national position so our final GiA outturn may increase by up to £8m if those opportunities are taken up. Technical Appendix A01 provides further details of the forecast by funding stream. Figure 3 also shows that we have spent just under £84m by the end of February.
3.2.4 It can be seen from both figures 2 and 3 that the expenditure profile up to the end of the financial year is much more linear than in previous years. This reflects the fact that significant claims by LLFA delivered schemes have been made in August which is an indicator of the good progress being made in construction.

3.2.5 Our forecast for delivery of Outcome Measures 2 and 3 in 2019/20 is 18,814 and 742 respectively. This is a further reduction in forecast for OM2 on top of the significant reduction of 1,762 reported at the last P&I meeting which was primarily resulting from the inundation of Bentley Ings Pumping Station scheme during the November flood event. The main change since the last report to P&I is the reduction in OM2 because of the suspension of works at the Cottingham & Orchard Park scheme where 1,008 of the 2,050 forecast have been delivered. We reported a reduction in forecast of 35 OM3 due to delays in the Robin Hood’s Bay scheme at the last meeting, there has been no further reduction in OM 3. In addition to OM2 and 3 we are forecasting to deliver 41Ha of habitat improvements under OM4a, primarily consisting of 16 Ha for Sheffield Lower Don Valley, 9 Ha for work with the Pennine Peat Partnership, and 11 Ha for the Wombwell Ings Scheme the balance being made up from 3 smaller projects. We are also forecasting to improve 6km of watercourse under OM4c. A definition of outcome measures is provided in Technical Appendix A02.

3.3 Top 10 Schemes in 2019/20

3.3.1 A full summary of the 2019/20 programme is provided as Technical Appendix A03.

3.3.2 The following tables indicate the top 10 schemes against key criteria. Table 2 below shows the top 10 schemes by remaining GiA spend in 2019/20.
### Table 2: Top 10 Schemes by Remaining GiA Spend 2019/20 (£k)

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Year-end forecast (£k)</th>
<th>GiA (Inc Booster) (£k)</th>
<th>Remaining GiA spend (£k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humber: Hull frontage</td>
<td>9,613</td>
<td>8,583</td>
<td>1,897</td>
</tr>
<tr>
<td>Hessle Foreshore Tidal Defences (HeFTD)</td>
<td>1,400</td>
<td>1,332</td>
<td>1,332</td>
</tr>
<tr>
<td>Mytholmroyd Flood Alleviation Scheme</td>
<td>14,603</td>
<td>13,483</td>
<td>1,186</td>
</tr>
<tr>
<td>Bentley PS Replacement</td>
<td>5,601</td>
<td>4,676</td>
<td>1,010</td>
</tr>
<tr>
<td>Sheffield Watercourses Culvert Renewal Programme</td>
<td>1,400</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Yorkshire November 2019 Flood Recovery</td>
<td>1,000</td>
<td>1,000</td>
<td>996</td>
</tr>
<tr>
<td>Hull River Defences - Phase 1</td>
<td>13,532</td>
<td>10,605</td>
<td>788</td>
</tr>
<tr>
<td>Foss Barrier Recovery Scheme</td>
<td>6,268</td>
<td>6,268</td>
<td>660</td>
</tr>
<tr>
<td>Otley Flood Alleviation Scheme</td>
<td>415</td>
<td>397</td>
<td>397</td>
</tr>
<tr>
<td>Leeds FAS Phase 2</td>
<td>7,617</td>
<td>5,500</td>
<td>382</td>
</tr>
<tr>
<td><strong>Top 10 Total</strong></td>
<td><strong>61,447</strong></td>
<td><strong>52,842</strong></td>
<td><strong>9,647</strong></td>
</tr>
<tr>
<td>Other Schemes outside of the top 10</td>
<td>57,298</td>
<td>43,247</td>
<td>3,185</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>118,745</strong></td>
<td><strong>96,089</strong></td>
<td><strong>12,832</strong></td>
</tr>
</tbody>
</table>

All of the above schemes are on track to achieve the above spend in this financial year.

3.3.3 Table 3 below shows the top 10 schemes by Outcome Measure 2 or 3 delivery in 2019/20. OM 2 and 3 refer to properties at reduced risk of flooding or coastal erosion respectively.

### Table 3: Top Schemes by OM2 + OM3

<table>
<thead>
<tr>
<th>Project Name</th>
<th>OM2 + OM3 F’cst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humber: Hull frontage</td>
<td>14,750</td>
</tr>
<tr>
<td>Anlaby and East Ella Flood Alleviation Scheme</td>
<td>1,330</td>
</tr>
<tr>
<td>Cottingham and Orchard Park Flood Allevation Scheme</td>
<td>1,008</td>
</tr>
<tr>
<td>Hull River Defences - Phase 1</td>
<td>968</td>
</tr>
<tr>
<td>Scarborough Spa</td>
<td>380</td>
</tr>
<tr>
<td>Whitby Harbour Works MU17 &amp; MU18</td>
<td>376</td>
</tr>
<tr>
<td>Kirklees Culvert Programme</td>
<td>178</td>
</tr>
<tr>
<td>Sheffield Watercourses Culvert Renewal Programme</td>
<td>155</td>
</tr>
<tr>
<td>Pocklington Flood Alleviation Scheme</td>
<td>134</td>
</tr>
<tr>
<td>Earby FAS Ph 1 Victoria Clough Culvert Repair</td>
<td>91</td>
</tr>
<tr>
<td><strong>Top 10 Total</strong></td>
<td><strong>19,370</strong></td>
</tr>
<tr>
<td>Other Schemes outside of the top 10</td>
<td>186</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>19,556</strong></td>
</tr>
</tbody>
</table>
3.3.4 Table 4 below shows the top 10 schemes by contribution required in 2019/20. Overall this shows a strong position for the year with all the projects showing that the contributions are secure.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Contributions (Pub + Priv) F’cst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarborough Spa</td>
<td>3,274</td>
</tr>
<tr>
<td>Hull River Defences - Phase 1</td>
<td>2,927</td>
</tr>
<tr>
<td>Wyke Beck Improvements, Leeds</td>
<td>2,382</td>
</tr>
<tr>
<td>Leeds FAS Phase 2</td>
<td>2,117</td>
</tr>
<tr>
<td>Whitby Harbour Works MU17 &amp; MU18</td>
<td>1,862</td>
</tr>
<tr>
<td>Mytholmroyd Flood Alleviation Scheme</td>
<td>1,120</td>
</tr>
<tr>
<td>Humber: Hull frontage</td>
<td>1,030</td>
</tr>
<tr>
<td>Sheffield Upper Don Flood Alleviation Scheme</td>
<td>1,000</td>
</tr>
<tr>
<td>Bentley PS Replacement</td>
<td>925</td>
</tr>
<tr>
<td>Whitby Church Street FAS</td>
<td>626</td>
</tr>
<tr>
<td><strong>Top 10 Total</strong></td>
<td>17,264</td>
</tr>
</tbody>
</table>

| Other Schemes outside of the top 10         | 2,780                            |
| **Grand Total**                             | 20,044                           |

3.4 Risks to Programme 2019/20 – 2020/21

3.4.1 Looking across the remaining years of the investment programme there is increasing confidence in delivering our target of 67,000 OM2 & 3 although there are continuing risks relating to the challenges of construction in a demanding environment. Our current forecast is 66,973. However we have some options to increase this marginally to achieve the 67,000 target. Table 5 shows the top 10 schemes by outcome measure 2 and 3 over the remaining life of the investment programme, alongside the contributions needed to deliver the schemes.

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Humber: Hull frontage</td>
<td>26,094</td>
<td>22,008</td>
<td>19,008</td>
<td>3,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Hessle Foreshore Tidal Defences (HeFTD)</td>
<td>4,464</td>
<td>7,402</td>
<td>3,123</td>
<td>4,279</td>
<td></td>
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<td>4</td>
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<tr>
<td>Hull River Defences - Phase 1</td>
<td>2,571</td>
<td>22,174</td>
<td>19,247</td>
<td>2,927</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Cottingham and Orchard Park Flood Alleviation Scheme</td>
<td>2,050</td>
<td>8,999</td>
<td>8,999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Bentley PS Replacement</td>
<td>1,669</td>
<td>5,865</td>
<td>4,940</td>
<td>925</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Anlaby and East Ella Flood Alleviation Scheme</td>
<td>1,330</td>
<td>7,234</td>
<td>7,234</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Foss Barrier Recovery Scheme</td>
<td>1,184</td>
<td>7,910</td>
<td>7,910</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Filey Flood Alleviation Works</td>
<td>494</td>
<td>3,244</td>
<td>2,259</td>
<td>30</td>
<td>955</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Kirkles Culvert Programme</td>
<td>422</td>
<td>433</td>
<td>433</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Scarborough Spa</td>
<td>380</td>
<td>4,493</td>
<td>1,219</td>
<td>3,274</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td><strong>Top 10 Total</strong></td>
<td>40,658</td>
<td>89,762</td>
<td>74,372</td>
<td>14,435</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>955</td>
</tr>
<tr>
<td>Other Schemes outside of the Top 10</td>
<td>1,968</td>
<td>223,558</td>
<td>76,651</td>
<td>88,204</td>
<td>34,301</td>
<td>2,532</td>
<td>565</td>
<td>6,195</td>
<td>15,110</td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>42,626</td>
<td>313,319</td>
<td>151,023</td>
<td>88,204</td>
<td>48,736</td>
<td>2,532</td>
<td>565</td>
<td>7,150</td>
<td>15,110</td>
<td></td>
</tr>
</tbody>
</table>

3.4.2 The delivery confidence rating is shown on a scale of 1 to 4, where 1 is low confidence; 2 is Medium to Low Confidence; 3 is Medium to High confidence and 4 is High confidence.
3.4.3 Since the last report confidence in delivery by March 2021 remains predominantly high only 1 scheme in the top 10 with a delivery confidence of less than 4, namely Filey FAS.

3.4.4 **Filey:** Scarborough BC have concluded the legal agreements on the land purchases that will enable progress with the scheme at Filey. The contract has been issued to the supplier with a view to starting on site in April with completion by December 2020. Accordingly, we have increased the confidence rating for this scheme from 2 to 3, recognising there is minimal float in the programme.

The sequencing of work is being planned to ensure that work is completed in such a way as to maximise OM delivery up front.

**Post P&I meeting Note:** Since the P&I meeting Scarborough BC have indicated that whilst the contract had been issued to the supplier, it had not been returned. Therefore Scarborough have taken the decision not to formally enter into a contract until the risk related to Covid-19 has passed. This will impact on the timing of the delivery of the OM2 properties.

3.4.5 The Committee consented to the 2021 programme at the January meeting. Figures 4 and 5 show a comparison of funding needed over the final year of the programme 2020/21 between the January consented programme and the latest forecast. Figure 4 is the total project expenditure and Figure 5 is FCRM GiA (including booster funding) element. Based on the current forecast the proposed allocation is sufficient to fund the programme, both in terms of overall funding and Grant in Aid. This does not however take account of the full impact of any additional funding requirements arising from the recent flooding.
3.5 **Priority Programme for Outcome Measure Delivery**

3.5.1 Figure 6 shows our Outcome Measure delivery performance to date and our forecast for delivery in future years.

![Fig. 6 Outcome Measure 2 & 3 delivery 2015/16 to 2020/21](image)

3.5.2 In order to focus on delivery of our commitment to deliver reduced risk to 67,000 properties (OM 2 & 3), we have developed a priority programme of schemes which deliver more than 100 OMs, or are significant for other reasons. There are 47 schemes making up the priority programme which is provided as Technical Appendix A04. These 47 projects deliver 98% of the Committee’s Outcome Measure Target.

3.6 **Economic Benefit of the Investment Programme**

3.6.1 Whilst, currently the main driver for the programme is to better protect 300,000 residential properties (nationally), there are significant residual economic benefits from the programme. Table 6 below shows the residual economic benefit of the programme by sub-regional partnership area.

<table>
<thead>
<tr>
<th>Partnership</th>
<th>Total PV Benefit £(m)</th>
<th>OM2 +OM3 £(m)</th>
<th>Benefit of OM2/3 £(m)</th>
<th>Non Residential Benefits £(m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Yorkshire</td>
<td>3,613</td>
<td>57,124</td>
<td>635</td>
<td>2,979</td>
</tr>
<tr>
<td>North Yorkshire</td>
<td>771</td>
<td>3,607</td>
<td>40</td>
<td>731</td>
</tr>
<tr>
<td>South Yorkshire</td>
<td>656</td>
<td>6,561</td>
<td>73</td>
<td>583</td>
</tr>
<tr>
<td>West Yorkshire</td>
<td>285</td>
<td>1,922</td>
<td>21</td>
<td>264</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,326</strong></td>
<td><strong>69,214</strong></td>
<td><strong>769</strong></td>
<td><strong>4,557</strong></td>
</tr>
</tbody>
</table>

3.6.2 Whilst this is a high level assessment and the data will be variable depending on the stage each project is at, it does provide a good indicator of economic benefits. The benefit is based on the present value of flood damage avoided.

3.6.3 Table 7 shows the economic benefit of those schemes where there is a contribution from Local Levy.
Table 7: Economic Benefit of YRFCC with a LL Element projects which deliver their outcomes between 2015/16 - 2020/21

<table>
<thead>
<tr>
<th>Partnership</th>
<th>Local Levy Investment</th>
<th>Total PV Benefit £(m)</th>
<th>OM2 +OM3 £(m)</th>
<th>Benefit of OM2/3 £(m)</th>
<th>Non Residential Benefits £(m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Yorkshire</td>
<td>2.1</td>
<td>166</td>
<td>2163</td>
<td>24</td>
<td>142</td>
</tr>
<tr>
<td>North Yorkshire</td>
<td>2.9</td>
<td>177</td>
<td>1134</td>
<td>13</td>
<td>165</td>
</tr>
<tr>
<td>South Yorkshire</td>
<td>1.0</td>
<td>129</td>
<td>740</td>
<td>8</td>
<td>121</td>
</tr>
<tr>
<td>West Yorkshire</td>
<td>2.2</td>
<td>285</td>
<td>650</td>
<td>7</td>
<td>278</td>
</tr>
<tr>
<td>Total</td>
<td>8.1</td>
<td>758</td>
<td>4687</td>
<td>52</td>
<td>706</td>
</tr>
</tbody>
</table>

3.7 Asset Condition

3.7.1 Our 2019/20 proposed target for EA assets in high consequence systems remains at 97.0%. For third party assets the target is 90.0%.

The targets and data are as at 17th March 2020 however there are many asset inspections still to be completed and so there is likely to be a deterioration in the numbers as inspections are completed. The analysis and actions arising is ongoing. Inevitably there will be a significant number of repairs required.

Figure 7 is based on the data as at the 17th March and shows that the percentage of assets at target condition for EA assets is slightly down from 95.2% at the last report at 94.3% and down slightly 91.8% at 90.9% for other RMA assets. We are on forecasting to achieve the target for 3rd party assets largely as a result of the Hull River Defences work where a number of the assets are unknown 3rd party assets. Our current forecast for EA assets is that we will be under the target. We continue to target repairs to assets which have the highest consequence and are most urgent, rather than artificially target the number of assets.

3.8 Efficiency

3.8.1 One of the key conditions of the 6-year programme settlement is that all Risk Management Authorities contribute to achieving a 10% efficiency target. Table 8 below shows the indicative targets for efficiency assuming 10% of the GiA allocation (including “booster” funding), gives us a target for 2019/20 of 9.3, distributed as £7m for EA delivered projects and £2.3m for other RMAs. In Q3 we have had a further £1.59m accepted. We were successful in having an efficiency claim of £737k by East Riding of Yorkshire for the Cottingham & Orchard Park FAS accepted. Having established the principle we are now going to apply the same rationale across East Riding’s major projects which should see significant efficiencies delivered. Our draft Q4 submission is looking positive with £2.2m having been accepted already and a further £1.8m pending additional information.
3.8.2 It is pleasing to note the progress that has been made against this challenging target, but we need to recognise the scale of the challenge for the remainder of the programme. We continue to urge all RMAs, including EA project managers to submit efficiency reports.

3.9 FUTURE PROGRAMME

3.9.1. As a result of the latest programme refresh, the indicative budget for 2020/21 is £143m across all funding streams of which £105.3m is GiA & Booster funding. Based on the current forecast we believe this is sufficient to deliver the current programme.

3.9.2. Looking ahead to the next 6-year period, there is very positive news arising from the budget with where we have been allocated £5.2bn of capital funding from April 2021 to March 2027 to better protect 336,000 properties, with a key distinction being that it includes both homes and non-residential properties. Non-residential properties includes shops, business premises, industrial sites, emergency services stations, schools, public services building, hospitals, utility sites, road and rail stations.

3.9.3. £140m of the £5.2bn will be brought forward into 2020/21. Of this £140m, £100m is to give the next programme a ‘warm’ start by commencing work early on schemes that will then better protect properties in the next 6-year programme. A further £40m is for work on assets where we have historically struggled to secure funding.

3.9.4. An additional £25m revenue funding to fund people and some non-manpower costs. We are working through the detail of how we will use this funding to support the capital programme and wider FCRM activities.

3.9.5. An additional £120m for recovery funding for 2020/21 to repair assets damaged in the Autumn and Winter floods.

3.9.6. An additional £200m for a place-based resilience programme from April 2021 to March 2027. Details of exactly what is meant by this have yet to be clarified.

3.9.7. Whilst this is generally positive news capacity to deliver a step change in investment will be a challenge.

3.9.8. Locally, at Area level, we still have further work to do to improve our confidence in the future programme and look at how we can accelerate work in areas that have been affected by the winter floods. We are working with national colleagues to ensure we receive our share of the additional investment provided to deal with the immediate damage to assets caused by the winter flooding.

3.8.2 It is pleasing to note the progress that has been made against this challenging target, but we need to recognise the scale of the challenge for the remainder of the programme. We continue to urge all RMAs, including EA project managers to submit efficiency reports.

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3.9.9. The schemes identified in the 2019 refresh of the programme for the 6 years (April 2021 to March 2027) indicate that there is an investment need of £588m of which £320m is FCRM GiA and legacy booster funding (based on the current funding rules), £61m of potential contributions have been identified, including £4m of local Levy and £193m of further contributions would be required. £193m of investment has a partnership funding score of over 80%. Whilst it is anticipated that the proposed changes in funding rules will provide an uplift in the GiA available to schemes, there will remain significant challenges to identifying and drawing in additional funding contributions. Approximately 26,000 homes would be better protected with this investment.
4. LOCAL LEVY PROGRAMME

4.1 Sarah Ducker presented the Local Levy programme update (Technical Appendix A05). At the start of the year, £5.8 million was available for investment in locally-important flood and coastal erosion risk management projects and, following the Committee’s approval of alterations to the Levy programme in January, the programmed value of work for 2019/20 was just under £3 million. Indicative spend to date, at the end of February, was just under £1.6 million, with a current indicative full-year forecast of over £2.6 million as shown in Table 9. Members should note that, due to the complexities of apportioning spend between funding sources, the quoted Local Levy spend to date and full-year forecast should be taken as indicative.

<table>
<thead>
<tr>
<th>Table 9 – YRFCC Local Levy 2019/20 Financial Summary (£k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Levy funding available in 2019/20 (including balances carried from previous years)</td>
</tr>
<tr>
<td>Approved allocation to projects in 2019/20 (January 2020)</td>
</tr>
<tr>
<td>Balance to carry at year-end</td>
</tr>
<tr>
<td>Spend to date</td>
</tr>
<tr>
<td>Full year forecast</td>
</tr>
<tr>
<td>Variance</td>
</tr>
</tbody>
</table>

4.2 Of the £1 million spend remaining to achieve this forecast, almost £850,000 is dependent upon claims being made by other RMAs in time for them to be processed before year-end. Members were advised that at the time of the meeting claims had been submitted for over £800,000 of this either before or around the time of the claim deadline; however, we will not know until after financial year-end whether it has been possible for payment for all of these to be processed this financial year.

4.3 Changes to the current programme, detailed in Technical Appendix A05, were discussed. All changes to the current programme are shown in red font in Technical Appendix A06. We noted one claim made against a previously approved Levy allocation that had been released from the programme: Kirklees Council request the re-allocation of £2,500 of Levy for the Dearne Valley initial assessment (line 97) to cover the cost of exploring the impact of increased tree cover on the catchment prior to finalising the report. There were eight requests to re-profile Levy allocations from 2019/20 into 2020/21, with a total value of £217,000, the most significant of these being a transfer of £125,000 of the Bradford Flood Programme Board’s allocation for the Keighley and Stockbridge flood alleviation scheme (line 83) after FCRM GiA was secured to carry out further modelling prior to commencing work on the strategic outline case.

4.4 It is recommended that the YRFCC approve the reallocation of £2,500 Levy for the Dearne Valley initial assessment.

4.5 It is recommended that the YRFCC approve the re-profiling of allocations from 2019/20 into 2020/21 as detailed in Technical Appendix A06.

4.6 It is recommended that the YRFCC approve the 2019/20 Local Levy programme as detailed in Technical Appendix A06 (Local Levy for Approval) to the Committee.

4.7 At the time of drafting the paper, we have not been notified of any further changes to the future Levy programme. The future profiled programme spend, taking into account
changes to the current programme outlined in paragraph 4.3, is as detailed in Technical Appendix A06 and summarised in Table 10. As agreed at the January 2020 YRFCC meeting, the Committee’s current Levy programme in Technical Appendix A06 has been enhanced to provide visibility of the scale of potential Levy needs to support the future programme, and members were reminded that these future needs have currently been identified by only around one third of RMAs.

4.8 *It is recommended that the YRFCC approve the indicative Local Levy profile in future years for projects in the current programme as detailed in Technical Appendix A06 and shown in bold in Table 10.*

<table>
<thead>
<tr>
<th>Table 10 - YRFCC Local Levy Programme 2019/20 to 2023/24 (£k)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Local Levy raised (assumed)</td>
</tr>
<tr>
<td>Balances carried from previous year</td>
</tr>
<tr>
<td>Total Local Levy available in year</td>
</tr>
<tr>
<td>Total programmed spend (current programme)</td>
</tr>
<tr>
<td>Total YRFCC Levy pipeline</td>
</tr>
<tr>
<td>Total programmed spend inc. Pipeline (not yet approved)</td>
</tr>
<tr>
<td>Balance to carry at year-end</td>
</tr>
</tbody>
</table>

New requests for Levy funding

4.9 Following the changes outlined above, the value of Levy programmed for 2020/21 is now just under £4.4 million, with the potential to add just over £1.2 million of works into the programme without it becoming overcommitted.

4.10 Members considered an update on the funding strategy for the Earby FAS (Phase 2) project. This followed discussions at the West Yorkshire Flood Risk Partnership meeting in respect of a request for Local Levy to support the funding package for this project. Whilst very supportive of the project itself, and keen not to lose the £635,000 ESIF funding that had been secured, disappointment was expressed about the level of contributions from Lancashire County Council given the wider benefits that would derive from the project. Pendle Council is actively seeking to secure additional contributions from a number of sources to reduce the funding gap, including from the County Council. P&I expressed support for the approach being taken that would allow for a reduced Levy request. They were keen for the project to go ahead which would help protect Earby town centre and were keen not to lose the European Structural Investment Fund funding.

4.11 *P&I recommend that the Committee support an allocation of Levy at its July 2020 meeting in principle, with Lancashire County Council providing a more proportionate contribution.*
Requests have been received from four Risk Management Authorities to allocate Levy towards five projects with a total value of £343,000 in 2020/21. The requests are summarised in Technical Appendix A07, to which the following line numbers refer. All of the requests are for Levy in support of projects not previously shown in the Committee’s Levy programme: three of them are to support schemes, one is in support of a natural flood management project (line 3) and one is for a study into the indirect costs of flooding to small and medium enterprises (line 5). The requests have all been endorsed by the relevant Flood Risk Partnerships.

Each of the Levy requests were discussed in detail, some discussion points follow below:

**Scarborough BC – Robin Hood’s Bay Seawall Capital Maintenance Scheme**

Members agreed the considerable importance of this scheme for the community and tourist economy of Robin Hood’s Bay. Members were concerned, however, about the amount of Levy being requested in relation to the contribution being made by Scarborough BC (SBC). It was agreed that Cllr David Jeffels would liaise with SBC to see if they could increase their contribution towards the scheme. Members supported the request with the recommendation that a further contribution is sought from SBC to reduce the demand on Levy.

*Post-meeting note:* Cllr Jeffels has confirmed that SBC are likely to increase their contribution by £64,000 to £100,000 although they are unable to confirm this due to restrictions on meetings by the lock down. At the time of drafting this note, it is not clear how soon this additional contribution can be secured and confirmed.

**Black Drain IDB – Weed Screen Replacement Works**

Members considered a request from Black Drain IDB for Levy to replace weed screens at two of their pumping stations. Whilst recognising the strategic case for this project, members felt that the request had insufficient information about benefits and about the funding contribution from the IDB or other key stakeholders. Provided these matters could be satisfactorily addressed, P&I were content for the proposal to proceed to the YRFCC meeting.

*Post-meeting note:* The applicant has decided to defer this request to a future round to allow time to investigate further funding sources and address the queries raised.

**Environment Agency – Wilder Waterways in the Lower Don (WiLD)**

Members were pleased to see proposals for such a broad study across a large area of the lower catchment and felt that there are lessons that could be learned and shared from implementing Natural Flood Management interventions in lower catchments. Rachel Glossop noted catchment similarities with the Hull City Council led River Hull Natural Flood Management Study and advised that, as the outcomes need people and behavioural change, most of the funding is likely to be needed to support engagement. Members were supportive of the request.

**Wakefield Council – Reid Park Beck, Horbury, Wakefield**

Members noted that very little is known about the system and flood risks in this part of Horbury which has suffered from repeated recent flooding. Members noted that the pumps are currently under no one’s management and Paul Maddison informed us that Wakefield Council will be taking over management of the pumps to ensure they are maintained. Members were supportive of the request.
Paul Maddison thanked Mark Wilkinson and officers from the operations team at the Environment Agency for their help at Reid Park Beck.

**Environment Agency – SME Indirect Costs and Flood Risk**

Members noted the good learning to come from this project, and agreed that this is a good use of Levy to get the project underway. Members hoped the learning could be scaled up to the whole region, and recommended liaising with the University of Hull’s Flood Resilience Innovation Centre to share and expand the learning. Members were supportive of the request.

4.14 **It is recommended that the YRFCC allocate £200,000 to the Robin Hood’s Bay Seawall capital maintenance scheme on the understanding that £64,000 of this is underwriting Scarborough Borough Council until such time as they are able to approve an additional contribution.**

4.15 **It is recommended that the YRFCC allocate £35,000 to the Wilder Waterways in the Lower Don (WiLD) project.**

4.16 **It is recommended that the YRFCC allocate £60,000 to Reid Park Beck, Horbury, Wakefield.**

4.17 **It is recommended that the YRFCC allocate £18,000 to the SME Indirect Costs and Flood Risk project and that the project team liaise with the University of Hull’s Flood Resilience Innovation Centre.**

4.18 If all the recommended additions to the programme are approved the future profiled programme spend will be as shown in Table 11 in bold and just under £930,000 would remain available for allocation to the end of 2020/21. Both this table and Technical Appendix A06 have been enhanced to show the impact of indicative pipeline requests.

<table>
<thead>
<tr>
<th>Table 11 - YRFCC Local Levy Programme 2019/20 to 2023/24 (£k)</th>
<th>2019/20</th>
<th>2020/21</th>
<th>2021/22</th>
<th>2022/23</th>
<th>2023/24</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local Levy raised (assumed)</strong></td>
<td>2,529</td>
<td>2,593</td>
<td>2,593</td>
<td>2,593</td>
<td>2,593</td>
</tr>
<tr>
<td><strong>Balances carried from previous year</strong></td>
<td>3,267</td>
<td>3,026</td>
<td>926</td>
<td>3,057</td>
<td>4,417</td>
</tr>
<tr>
<td><strong>Total Local Levy available in year</strong></td>
<td>5,796</td>
<td>5,618</td>
<td>3,518</td>
<td>5,650</td>
<td>7,009</td>
</tr>
<tr>
<td><strong>Total programmed spend (Current Programme)</strong></td>
<td>2,770</td>
<td>4,693</td>
<td>271</td>
<td>168</td>
<td>96</td>
</tr>
<tr>
<td><strong>Total programmed spend (Pipeline only – not yet approved)</strong></td>
<td>0</td>
<td>0</td>
<td>190</td>
<td>1,065</td>
<td>1,257</td>
</tr>
<tr>
<td><strong>Total programmed spend (current and pipeline)</strong></td>
<td>2,770</td>
<td>4,693</td>
<td>461</td>
<td>1,233</td>
<td>1,353</td>
</tr>
<tr>
<td><strong>Balance to carry at year end</strong></td>
<td>3,026</td>
<td>926</td>
<td>3,057</td>
<td>4,417</td>
<td>5,657</td>
</tr>
</tbody>
</table>

4.19 Members were reminded that, at present, the pipeline reflects the ‘asks’ of just eight risk management authorities (less than one third of those identifying projects), with the majority of them (both by number and value) from a single RMA. We were also reminded
that the Sub-group has already been notified of the potential for further requests for Levy in the order of £3 million for the next few years that are not currently included in Table 11 and Technical Appendix A06.

4.20 Members stressed that Local Levy is an effective way of liberating other funding, and that it is considered and targeted carefully. There will be continuing need for Local Levy to support the delivery of the Committee’s programme.

5. YRFCC STRATEGIC ENGAGEMENT UPDATE: The meeting discussed the following agenda items:

5.1 Sub-regional Flood Risk Partnerships Update:

5.1.1 Members were presented with Jeremy Walker’s proposal for some Local Levy to be specifically targeted at the development of NFM across Yorkshire. Overall, the Flood Risk Partnerships were supportive of the proposal ‘in principle’ and the preliminary thinking behind the idea but that it was premature to commit to any financial figure at this stage. Members agreed for the Environment sub-group’s Task and Finish group to meet, discuss the proposal further, revise their paper (in line with the comments noted by the partnerships) and clearly identify the outcomes and work they intend to undertake. Members agreed to receive a revised paper in the next round for their consideration, which will then be progressed to the P&I and Environment sub-groups with a view to taking it to the July 2020 meeting of the Committee for formal consideration.

5.1.2 North Yorkshire: Members noted Bill Rodham’s detailed Investment Programme, In-Year Performance and Future Programme presentation. Members discussed the schemes with confidence ratings of 3 or below, to explain the reasons behind the rating. Dr. Paola Sakai provided an informative presentation on SME Indirect Costs and Flood Risk Levy bid, providing insight into bridging gaps to boost resilience, economic costs of flooding on SMEs, effective resilience measures and the beneficial outcomes of the study. Members reviewed two Local Levy proformas: Robin Hood’s Bay Seawall Capital Maintenance Scheme (Scarborough BC) for £200k in 2020/21 and the SME Indirect Costs and Flood Risk (Environment Agency) for £18k in 2020/21. After discussing the requests, members agreed to support the requests to the P&I meeting.

5.1.3 East Yorkshire: Members discussed the devastating flooding across Yorkshire and passed on their thoughts to all those effected by the floods. Members noted Bill Rodham’s detailed Investment Programme, In-Year Performance and Future Programme presentation. Members discussed the schemes with confidence ratings of 3 or below, to give reasoning behind the rating. Steve White delivered an informative presentation on the Broadcasting Trial that took place in East Yorkshire, members were pleased to note that the success of the trial and the positive responses from the public. No Levy requests were made in the Easy Yorkshire catchment for the Partnership to consider.

5.1.4 West Yorkshire: Members discussed the recent storms and flooding experienced in West Yorkshire during February, expressing sympathy for those homes and businesses that flooded, particularly in Calderdale. Members noted Bill Rodham’s detailed Investment Programme, In-Year Performance and Future Programme presentation. Members discussed the schemes with confidence ratings of 3 or below, to give reasoning behind the rating. Dr. Paola Sakai provided an informative presentation on the SME Indirect Costs and Flood Risk Levy bid, providing insight into bridging gaps to boost resilience, economic costs of flooding on SMEs, effective resilience measures and the beneficial outcomes of the study. Members discussed and reviewed three Levy requests; Earby Flood Alleviation Phase 2 (Environment Agency) for £300k in 2020/21,
Reid Park Beck, Horbury, Wakefield (Wakefield Council) for £60k in 2020/21 and SME Indirect Costs and Flood Risk (Environment Agency) for £18k in 20/21. All projects were supported in principle and recommended to proceed to the P&I sub-group for their consideration. However, in the case of Earby, concerns were raised regarding the scale of the request and discussions have led to further investigation into additional funding sources as noted above. (Note: the Earby request was subsequently reduced to £220k).

5.1.5 **South Yorkshire:** Members discussed the storm incidents in February, noting James Mead’s update on the temporary defences put in place in South Yorkshire. Members noted Tichaona Madzimbamuto’s detailed Investment Programme, In-Year Performance and Future Programme presentation. Members discussed the schemes with confidence ratings of 3 or below, to give reasoning behind the rating. Members discussed the importance of maintaining assets and repairing the current assets that are meeting the viable standards. Luke Ballantyne (ARUP) provided an informative presentation on the potential of existing Don Catchment reservoirs for flood risk reduction. Members discussed and reviewed two Levy requests; Weed Screen Replacement Works (Black Drain IDB) for £30k in 2020/21 and Wilder Waterways in the Lower Don (WiLD) (Environment Agency) for £35k in 2020/21. Both projects were supported by the members to progress to the P&I sub-group for their consideration. Members queried the processes involved in the assurance and approval of Local Levy, therefore Technical Appendix A08 has been included for further information on this.
6. SUMMARY OF RECOMMENDATIONS

6.1 It is recommended that the YRFCC:

1. Approve the reallocation of £2,500 Levy for the Dearne Valley initial assessment;
2. Approve the re-profiling of allocations between 2019/20 and 2020/21;
3. Approve the 2019/20 Local Levy programme as detailed in Technical Appendix A06 (Local Levy for Approval).
4. Approve the future year’s indicative Local Levy profile for projects in the current programme as detailed in Technical Appendix A06.
5. Support an allocation of Levy to the Earby FAS (Phase 2) at its July 2020 meeting in principle, subject to Lancashire County Council providing a more proportionate contribution.
6. Approve allocations of Local Levy for 2020/21:
   a. Allocate £200,000 to the Robin Hood’s Bay Seawall capital maintenance scheme (Line 1, Technical Appendix A07) on the understanding that £64,000 of this is underwriting Scarborough Borough Council until such time as they are able to approve an additional contribution.
   b. Allocate £35,000 to the Wilder Waterways in the Lower Don (WiLD) project (Line 3, Technical Appendix A07).
   c. Allocate £60,000 to Reid Park Beck, Horbury, Wakefield (Line 4, Technical Appendix A07).
   d. Allocate £18,000 to the SME Indirect Costs and Flood Risk project (Line 5, Technical Appendix A07).

Professor Colin Mellors
Chair of P&I Sub-Group

Back to agenda
Recommendations:

The RFCC Committees are asked to:

1. Note the significant future investment announced in the spring Budget, and the subsequent additional funding for 2020/21 as a result.

2. Note the targets associated with the existing 2020/21 funding allocation.

3. Note changes to this year’s refresh process as a result of COVID-19.

Headline messages:

- The Environment Agency Board approved the capital and revenue allocation for 2020/21, following RFCC Committee consent in January 2020. This allocation, and the associated targets are set out in appendix 1.

- The Committee’s targets for 2020/21 will be subject to the implications of COVID-19 and the various impacts this will have on all our work.

- Future investment in FCRM was confirmed in the March Budget, with a £5.2bn capital investment for the next 6 years, from April 2021.

- Draft allocations for the additional funding for 2020/21 for the £100m capital programme pipeline development fund, and the £120m asset recovery programme following this winter’s flood events, are set out in appendix 3.

- We are currently reviewing the capital programme refresh timescales given the current situation. Regardless of timescales, local choices and the RFCCs involvement in programme development will continue to play a key role.
1.0 Background

1.1 At the last round of meetings in January, the RFCC Committees were presented with their indicative capital and revenue programmes for consent. On 12 February 2020 the Environment Agency Board approved the allocation of funding for 2020/21.

1.2 The RFCC Committees play an important role in shaping and confirming the final programmes. The Environment Agency Board recognises and appreciates the support and guidance on local priorities which the Committees provide.

1.3 The allocations for 2020/21 (not including any of the new additional funding) and the associated targets are set out in Appendix 1. The Committees are asked to note their individual contribution to these targets, subject to the implications of COVID-19.

1.4 Since the last meeting a lot has happened – successive storms and flood events, the spring Budget and now COVID-19. Below we set out the latest position on funding allocations and the impact of COVID-19 on our refresh and allocations process.

2.0 Budget Settlement

2.1 At the budget on 11th March, the Chancellor announced we will be getting the following investment for flood and coastal risk management (FCRM):

- £5.2bn capital funding for the next 6 years, from April 2021 to March 2027, to better protect 336,000 properties. Properties will include both homes and non-residential properties, such as shops, businesses, schools, hospitals, etc.

- £140m of this £5.2bn will be brought forward into 2020/21.
  - Of this £140m, £100m is a capital pipeline development fund to give the next programme a ‘warm’ start by commencing work early on schemes that will then better protect properties in the next 6 year programme.
  - A further £40m is for work on assets where we have historically struggled to secure partnership funding.

- An additional £25m revenue funding for people and some non-manpower costs from 2020/21 associated with a larger capital programme.

- An additional £120m for asset recovery funding for 2020/21 to repair assets damaged in the autumn and winter floods (split £58m capital and £62m revenue).

- An additional £200m for a place-based resilience programme from April 2021 to March 2027. We are still in discussion with Defra regarding the allocation of this funding and will advise on the detail in due course.

2.2 This is a significant achievement for the future of FCRM. We are still awaiting further details from HM Treasury on any associated targets with this funding, such as partnership funding contributions, efficiency savings, and carbon reduction saving.

3.0 Additional funding allocations for 2020/21

3.1 Alongside the already confirmed allocations for 2020/21 for the final year of the current 6 year programme, as set out in appendix 1, we also now have the following additional funding for 2020/21:

- £100m pipeline development fund to give the next programme a ‘warm’ start;

- £40m of capital for work on assets where we have historically struggled to secure partnership funding; and
Item No: 5.2

- £120m to repair Environment Agency maintained assets damaged in the autumn and winter flooding.

3.2 We are still working with Area teams to confirm the full detail of these allocations. The draft indicative allocations for the £100m capital pipeline development fund and £120m asset recovery funding are set out in appendix 3. Details around the £40m asset funding will be shared in due course. We will confirm the final in-year increases to each RFCC allocation for 2020/21 in the July national allocation paper. We plan to track and monitor this additional funding separately to the current allocation for 2020/21.

3.3 Due to the impacts of COVID-19, and whether all construction sites can continue to operate, nationally we may need to move RFCCs allocations around in-year to ensure funding is used to best effect on schemes which are in a position to progress. These will be communicated if required and as the picture becomes clearer.

4.0 Indicative allocations – £100m capital pipeline development fund

4.1 The £100m capital pipeline development fund is to give the next programme a ‘warm’ start by commencing work early on schemes that will then better protect properties in the next 6 year programme.

4.2 At this stage we have made draft indicative allocations totalling £78m. The indicative allocation is based on schemes put forward by Areas and has been prioritised based on future properties better protected and by the confidence Areas gave that the pipeline work could be delivered. We aim to allocate the remaining £22m in early May.

4.3 Due to COVID-19 we recognise some scheme details are very likely to change and new opportunities may arise. The Environment Agency is working with supply partners and other Risk Management Authorities to determine what work on the pipeline can be completed.

4.4 We are developing a light touch assurance process, recognising the need to satisfy investment rules and progress at pace.

5.0 Indicative allocations – £40m asset replacement fund

5.1 The £40m is for end of life Environment Agency assets where we have historically struggled to secure partnership funding. This can include a wide range of assets.

5.2 We are working through detailed proposals with Area colleagues, aiming to allocate this funding by mid-April.

6.0 Indicative allocations – £120m recovery funding

6.1 The additional £120m for asset recovery funding for 2020/21 is to repair assets damaged in the autumn and winter floods.

6.2 At this stage we have made draft indicative allocations totalling £80m. The indicative allocation is based on more detailed information regarding the November flood incident and some early best estimates for storms Ciara and Dennis.

6.3 The national Recovery Team are working with Areas to build a recovery programme that will then go through a light touch assurance process. We will allocate the full funding once the recovery programme has been through assurance.
7.0 Indicative allocations – £25m revenue

7.1 The additional £25m revenue is approximately half of what Defra/EA asked for in our Budget submission. Of this £23.25m will come to the Environment Agency to fund people and some non-manpower costs from 2020/21. Defra Flood Policy team retain £1.75m as per their bid.

8.0 Annual refresh of the capital investment programme

8.1 At this time of year we would normally be starting the annual refresh of the capital programme, which for 2021/22 will be the first year of the next 6 year investment programme.

8.2 Given the impacts of COVID-19 we are pushing the start of this refresh back while we consider different options for how we can best capture the information we need given the current circumstances. Regardless of the timescales, local choices and the RFCC Committee’s involvement in programme development will still play a key part.

8.3 Once the timescales are confirmed we will share this with the Committees. We will also update the “Allocation process for FCRM” document which is usually circulated with the April papers to ensure all Committee members understand the process and know what to expect when throughout the year.

8.4 There could be some additional benefits to changing our timescales, such as more time to properly consider the impacts of the new Partnership Funding Rules, and a more rounded bid, happening later in the year, should give better insight into future year needs. The release of AIMS:PD (our new IT system for producing funding allocations) is also being deferred until further notice.

9.0 Annual refresh of the revenue maintenance programme

9.1 We are currently updating our Asset Management IT system, with the intention of this being ready for use in 2021. The transition to this new system means that we may need to change the information we provide to RFCCs throughout the year, although we are still expecting to provide programme level data for the January meetings.

9.2 The revenue maintenance allocation for 2021/22 is subject to the results of the Comprehensive Spending Review 2020 and we do not expect to know the outcome of this until the autumn. As a result we may need to prepare a range of scenarios for the RFCC Committees to review at their October meetings.

9.3 Guidance issued to Areas in April to support the refresh process will outline in more detail the allocation process and transition to the new asset management system. Further information can be provided to the Committees in the July paper if required.

10.0 Asset condition targets

10.1 We have struggled to meet our Key Performance Indicator (KPI) targets for asset condition for 2019/20. As of March, we have achieved 96% of EA maintained, high-consequence assets in required condition, against a target of 98%. The breakdown of these targets is set out in appendix 2.

10.2 This is largely due to multiple significant flood events through the year. Our assets have performed incredibly well over the course of the year in these incidents but the impact of the flood waters has reduced the condition of our assets and impacted
programmes of work to repair assets. We have a significant amount of recovery funding, announced in the Budget, which will help us return our assets to their required condition.

11.0 Latest position and updates

11.1 To keep RFCCs informed of the latest position below is a series of updates:

11.2 **300,000 homes better protected target**
The impacts of COVID-19 could significantly impact the delivery of the 300,000 homes target. We will do our best to proceed with schemes and operate as business as usual where safe to do so within Public Heath England guidelines. We want to ensure as many homes that can be better protected, particularly in advance of the next winter. However, we must continue to maintain the safety of our staff, partners and contractors, and follow Government advice throughout.

11.3 **Construction risks**
We are currently working with National and Area teams, and our supply partners, to understand what the Government’s advice regarding construction sites means for our schemes and the programme. There is a significant risk to our capital and revenue programme from contractors and suppliers being affected by resourcing and supply chain difficulties, and whether construction sites remain operational.

11.4 **Partnership Funding calculator**
Publication of the updated partnership funding calculator and supporting guidance has been slightly delayed. This is now expected to be published on gov.uk in mid-April.

11.5 **Programme publication & letters**
The updated capital investment programme for 2020/21 is still awaiting publication. Following approval by the Minister, this will be published on gov.uk. Due to this, we have yet to circulate the formal Risk Management Authority letters that would normally be sent in March to confirm the next financial year’s allocations. Once sign off by the Minister has happened we will circulate these letters. Area teams will have had verbal discussions with Local Authorities and IDBs as appropriate to confirm these allocations in the interim.

11.6 **Spending Review 2020**
The next Comprehensive Spending Review round has been delayed until the autumn. We will be preparing for this over the summer months to ensure we have a robust bid for future revenue funding.

12.0 Recommendations

12.1 The RFCC Committees are asked to:

1. Note the significant future investment announced in the spring Budget, and the subsequent additional funding for 2020/21 as a result.

2. Note the targets associated with the existing 2020/21 funding allocation.

3. Note changes to this year’s refresh process as a result of COVID-19.

**John Russon**  
**Deputy Director, Allocation and National Programme Management**  
8 April 2020
Appendix 1 – Allocation and delivery targets for 2020/21

The allocations and associated targets set out below are for 2020/21. They do not include any of the additional funding announced as part of the March Budget. It is also recognised that the delivery of these are subject to the impacts of COVID-19.

Table 1: Capital and revenue allocation for 2020/21

<table>
<thead>
<tr>
<th>RFCC</th>
<th>Total Capital allocation (£m)</th>
<th>Total Revenue Maintenance allocation (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglian Eastern RFCC</td>
<td>33.8</td>
<td>8.4</td>
</tr>
<tr>
<td>Anglian Great Ouse RFCC</td>
<td>26.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Anglian Northern RFCC</td>
<td>47.9</td>
<td>10.7</td>
</tr>
<tr>
<td>English Severn &amp; Wye RFCC</td>
<td>3.3</td>
<td>4.4</td>
</tr>
<tr>
<td>North West RFCC</td>
<td>67.7</td>
<td>10.9</td>
</tr>
<tr>
<td>Northumbria RFCC</td>
<td>13.9</td>
<td>2.5</td>
</tr>
<tr>
<td>South West RFCC</td>
<td>22.2</td>
<td>5</td>
</tr>
<tr>
<td>Southern RFCC</td>
<td>64.2</td>
<td>10.9</td>
</tr>
<tr>
<td>Thames RFCC</td>
<td>41.7</td>
<td>20</td>
</tr>
<tr>
<td>Trent RFCC</td>
<td>40.5</td>
<td>12.7</td>
</tr>
<tr>
<td>Wessex RFCC</td>
<td>13.6</td>
<td>7.4</td>
</tr>
<tr>
<td>Yorkshire RFCC</td>
<td>105.3</td>
<td>12.2</td>
</tr>
</tbody>
</table>

To note: (1) Capital and revenue allocation figures are as consented at the January 2020 RFCC meetings; (2) Revenue figures are for revenue maintenance activities only and include asset management revenue projects.

Table 2: Homes better protected targets for current 6 year capital programme

<table>
<thead>
<tr>
<th>RFCC</th>
<th>Delivered¹</th>
<th>Forecast²</th>
<th>Forecast Delivery³</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglian Eastern</td>
<td>2,048</td>
<td>621</td>
<td>325</td>
<td>1,086</td>
</tr>
<tr>
<td>Anglian Great Ouse RFCC</td>
<td>419</td>
<td>81</td>
<td>26</td>
<td>453</td>
</tr>
<tr>
<td>Anglian Northern RFCC</td>
<td>14,913</td>
<td>2,782</td>
<td>4,041</td>
<td>4,280</td>
</tr>
<tr>
<td>E. Severn &amp; Wye RFCC</td>
<td>287</td>
<td>325</td>
<td>752</td>
<td>886</td>
</tr>
<tr>
<td>North West RFCC</td>
<td>9,532</td>
<td>9,859</td>
<td>7,269</td>
<td>6,848</td>
</tr>
<tr>
<td>Northumbria RFCC</td>
<td>1,458</td>
<td>587</td>
<td>890</td>
<td>1,108</td>
</tr>
<tr>
<td>South West RFCC</td>
<td>447</td>
<td>822</td>
<td>3,576</td>
<td>4,808</td>
</tr>
<tr>
<td>Southern RFCC</td>
<td>10,215</td>
<td>13,258</td>
<td>13,694</td>
<td>12,924</td>
</tr>
<tr>
<td>Thames RFCC</td>
<td>4,715</td>
<td>3,219</td>
<td>7,997</td>
<td>4,072</td>
</tr>
<tr>
<td>Trent RFCC</td>
<td>1,369</td>
<td>1,983</td>
<td>472</td>
<td>1,036</td>
</tr>
<tr>
<td>Wessex RFCC</td>
<td>6,965</td>
<td>918</td>
<td>1,440</td>
<td>4,521</td>
</tr>
<tr>
<td>Yorkshire RFCC</td>
<td>2,101</td>
<td>8,062</td>
<td>5,382</td>
<td>8,732</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>54,469</strong></td>
<td><strong>42,517</strong></td>
<td><strong>45,864</strong></td>
<td><strong>50,754</strong></td>
</tr>
</tbody>
</table>

To note: ¹ Figures taken from audited final figures; ² Figures taken from latest forecast (March 2020); ³ Figures taken from latest refreshed programme (due to be published shortly) and exclude Natural Flood Management homes; ⁴ Figures show maximum possible outcome on homes better protected.
### Appendix 2 – Percentage of Environment Agency maintained, high-consequence assets in required condition against targets for 2019/20

<table>
<thead>
<tr>
<th>Environment Agency Area¹</th>
<th>RFCC</th>
<th>Year-end position as end of Q3 – Jan 2020 (%)²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridgeshire &amp; Bedfordshire</td>
<td>Anglian Great Ouse</td>
<td>98.11</td>
</tr>
<tr>
<td>Essex Norfolk &amp; Suffolk</td>
<td>Anglian Eastern</td>
<td>93.21</td>
</tr>
<tr>
<td>Lincolnshire &amp; Northamptonshire</td>
<td>Anglian Northern</td>
<td>95.94</td>
</tr>
<tr>
<td>Cumbria &amp; Lancashire</td>
<td>North West</td>
<td>96.86</td>
</tr>
<tr>
<td>Greater Manchester, Merseyside &amp; and Cheshire</td>
<td>North West</td>
<td>94.52</td>
</tr>
<tr>
<td>Northumberland, Durham &amp; Tees</td>
<td>Northumbria</td>
<td>95.31</td>
</tr>
<tr>
<td>Staffordshire, Warwickshire &amp; West Midlands</td>
<td>English Severn &amp; Wye / Trent</td>
<td>95.63</td>
</tr>
<tr>
<td>Shropshire, Hertfordshire, Worcestershire &amp; Gloucestershire</td>
<td>English Severn &amp; Wye</td>
<td>96.57</td>
</tr>
<tr>
<td>Devon &amp; Cornwall</td>
<td>South West</td>
<td>98.55</td>
</tr>
<tr>
<td>Kent &amp; South London</td>
<td>Southern / Thames</td>
<td>97.08</td>
</tr>
<tr>
<td>Solent &amp; South Downs</td>
<td>Southern</td>
<td>96.50</td>
</tr>
<tr>
<td>Hertfordshire &amp; North London</td>
<td>Thames</td>
<td>96.25</td>
</tr>
<tr>
<td>West Thames</td>
<td>Thames</td>
<td>94.24</td>
</tr>
<tr>
<td>Derbyshire, Nottingham &amp; Leicestershire</td>
<td>Trent</td>
<td>97.03</td>
</tr>
<tr>
<td>Wessex</td>
<td>Wessex</td>
<td>97.49</td>
</tr>
<tr>
<td>Yorkshire</td>
<td>Yorkshire</td>
<td>94.68</td>
</tr>
<tr>
<td><strong>Q3 Jan 2020 national total</strong></td>
<td></td>
<td><strong>96.12</strong></td>
</tr>
</tbody>
</table>

¹ Targets are reported by EA Area rather than RFCC boundaries
² The national target for 2019/20 for high consequence assets was 98%
### Table 2: £120m recovery funding draft indicative allocations for 2020/21

<table>
<thead>
<tr>
<th>RFCC</th>
<th>Capital (£k)</th>
<th>Revenue (£k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglian Eastern</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Anglian Great Ouse</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Anglian Northern</td>
<td>17,000</td>
<td>14,500</td>
</tr>
<tr>
<td>North West</td>
<td>760</td>
<td>440</td>
</tr>
<tr>
<td>Northumbria</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Severn &amp; Wye</td>
<td>1,800</td>
<td>2,250</td>
</tr>
<tr>
<td>Southern</td>
<td>2,340</td>
<td>2,376</td>
</tr>
<tr>
<td>Southwest</td>
<td>400</td>
<td>1,200</td>
</tr>
<tr>
<td>Thames</td>
<td>490</td>
<td>704</td>
</tr>
<tr>
<td>Trent</td>
<td>780</td>
<td>1,650</td>
</tr>
<tr>
<td>Wessex</td>
<td>200</td>
<td>1,100</td>
</tr>
<tr>
<td>Yorkshire</td>
<td>16,000</td>
<td>16,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39,770</strong></td>
<td><strong>40,220</strong></td>
</tr>
</tbody>
</table>

**Combined total**: 79,990

To note: (1) Figures show best estimates for recovery funding split across the RFCCs. Our recovery programme data at present is split by EA Area so in some places these figures represent a crude split of the funding by RFCCs; (2) Allocations remain subject to change following the assurance and approval processes for the recovery programme, and once the true extent of the impacts of Storm Ciara and Storm Dennis on our assets is known; (3) We have allocated around 70% of recovery funding while we work out the final details.
RECOMMENDATION

A. The committee is asked to note the report and the progress made on reducing flood risk around the Humber.

1 Purpose of report and introduction

1.1 This paper provides an overview on our flood risk management work on the Humber across the following Environment Agency areas: Lincolnshire & Northamptonshire; Yorkshire; and East Midlands.

Update of progress of the development of the new Humber Strategy – Humber 2100+

2 Update since last meeting

2.1 The programme remains on track to complete the draft strategy by the end of December 2021. Work on the test appraisal is progressing well, and will ultimately help ensure that the approach for the main appraisal is robust. The team is also considering how net-zero Carbon (in response the EA’s E-mission Targets), and also the United Nation’s Sustainability Goals (UNSDGs) can be used in the appraisal to help us determine a more sustainable long term, strategy.

2.2 We have held three very successful Scenario Development Workshops on 25th February, 3rd March and 5th March. The workshops included Environment Agency staff, members of the wider partnership, and key stakeholders respectively. The workshops form part of the appraisal workstream, but are also a key piece of work for strategy development more widely. We shared a range of technical information, in particular the modelling outputs, with attendees and asked them to use this to develop possible scenarios for managing tidal flood risk on the Humber Estuary which would be in line with the three strategic approaches already agreed by the partnership. This collaborative approach will enable us to take into account different opinions, and priorities, as we develop the final scenarios to be taken forward for appraisal. This work will form the basis of the public consultation which will be held this autumn. We are in the process of gathering the data and feedback from these workshops and will be working with the members of the partnership to agree final outputs. As well as an important piece of appraisal work, this was an excellent opportunity to engage more widely with our key stakeholders, and the wider partnership, keeping us on track to produce a truly collaborative new Humber Strategy.
2.3 The recent MDSF2 model runs have provided draft outputs that show the probability of flooding now and in 100 years. Following feedback from colleagues and partners, we are checking the model to ensure it is accurate in areas where the level of risk is different to what we expected. We have also completed the broadscale modelling work, which shows the impact which different flood risk management options could have around the estuary, and key inferences from this work were used to inform the recent scenario development workshops. We are currently in the process of reviewing the draft outputs of the new Humber extreme water levels, and expect the final datasets to be ready to start using this summer.

2.4 The engineering workstream is continuing to develop the whole life costing tool to also allow consideration of carbon emissions for both maintenance and capital works. This will allow us to test different scenarios, made up of different measures, which will consider carbon emissions in the same way as it considers costs. This will support the appraisal work and design processes. We will be able to run these scenarios at an asset level and estuary wide. We will also continue to develop and optimise this tool to ensure it gives a true reflection of how assets would have to change and adapt going forward. We have continued to consider asset integrity and the use of GIS to support mapping and analysis, and residual uncertainty (previously termed freeboard). The Capital Programme workstream team will reinstate interaction with all internal and external partners to support the spring 2020 refresh.
3 South Ferriby and Winteringham Ings Sea Defence Improvements

3.1 The South Ferriby Flood Alleviation scheme contract was awarded in February 2019, when enabling works started on site. The scheme will reduce the risk of tidal flooding to 150 homes, businesses and the CEMEX plant.

3.2 The strong partnership developed over the years between the Environment Agency, CEMEX, North Lincolnshire Council and the local community has flourished and continues with monthly meetings. The partnership has enabled the contractor JBAB to undertake the works with minimal complaints from industry, land owners and local community.

3.3 CEMEX have been transporting clay over the winter months and have currently stockpiled approximately 50,000 tonnes of material for construction of the western embankments in phase 2.

3.4 Detailed design is progressing at pace for the demountable defences across the A1077 and the embankment west of South Ferriby Sluice.

3.5 Following a 3 month break for the winter, Phase 2 works re-commenced in February 2020 with tree clearance and a new site compound area. Construction of flood walls along Sluice Road and embankments north and west of CEMEX will follow shortly.

3.6 Finishing works to the east embankment including, trimming, top-soiling/grass seeding and Fulsea Drain head wall construction, is programmed to take place later in the spring.

3.7 An engagement event with the local community is planned in the 1st week in April 2020. This event is to discuss the proposed A1077 flood gates installation, together with the environmental mitigation works. Construction completion is still expected by March 2021.

4 Humber Hull Frontage Improvements

4.1 Funding has been secured for this £42 million tidal flood defence scheme which will reduce the risk of flooding to 113,000 homes and businesses. The scheme will improve around 7km of tidal defences through the city of Hull.

4.2 Construction started in January 2019 at St Andrew’s Quay Retail Park. Construction is also underway at Victoria Dock Village in the eastern and western sections, St Andrew’s Dock, Albert Dock and Victoria Pier. Work on the scheme will be complete in early 2021.

5 Donna Nook

5.1 Donna Nook Managed Realignment project cut a breach in the front line of the tidal defences at Pye’s Hall sluice in 2019.
5.2 We are expecting to return to site this May/June (to be confirmed) to complete the breach, where several piles that lie below the water (where Pye’s Hall sluice once sat) have been problematic. We need to remove these remaining piles as the design for the volumes of water onto the realignment site are critical to the 106 ha inundated area. However, the breach so far has seen impressive tidal extents within the site.

5.3 When we return later this year we will also be undertaking the road widening scheme, which requires several utility diversions. We are already working with communities to ensure they remain informed of any disruption.

6 Covid-19 Update

6.1 The Humber2100+ project team are still in the process of understanding how Covid-19 has and will continue to impact on the Humber2100+ project. The team are planning how best to move forward, particularly as we are at such a pivotal stage in strategy development, though this could change depending on instructions given by the Environment Agency’s Executive Directorate Team.

6.2 As a partnership project, it is critical that we continue to get contributions and steer from our partners and stakeholders throughout these next few months. In the short term, we have already seen impacts on our work such as the Public Consultation and the Scenario Development process, which we are unable to progress as previously planned. Once we have understood the impacts in more detail, we will be able to provide an update on how this will impact the programme long term. We will endeavour to keep strategy development and the project programme on track as best as possible.

Philip Winn
Humber Manager

Helen Todd
Humber Flood Risk Manager

Back to agenda