



Wessex Regional  
Flood and Coastal Committee  
Tuesday 14<sup>th</sup> January 2020

We are the Environment Agency. We protect and improve the environment and make it a better place for people and wildlife.

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

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

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

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**Wessex Regional Flood & Coastal Committee Meeting**  
**14 January 2020**



**Members of Wessex Regional Flood and Coastal Committee**

Members of the Wessex Regional Flood and Coastal Committee are invited to attend a meeting of the Committee on Tuesday 14<sup>th</sup> January 2020 at 10.00 am.

The meeting will be held at The Guildhall, High Street, Bath, BA1 5AW.

At the end of the last Committee meeting in October, some members requested that we find a venue that is accessible via public transportation. We have chosen a city centre venue, and would like to encourage attendees to travel by train or other public transportation where possible. Bath is also served by 3 Park and Ride locations. Additional information and directions are provided overleaf.

For those who need to drive directly to the venue, please note that there is no parking on site. The nearest public car park is listed with the directions.

Refreshments will be available from 9.30 am and a buffet lunch will be provided. Please notify Committee Services if you have any specific dietary requirements so that these can be catered for.

All members are strongly encouraged to read the papers in advance of the meeting. LLFA members are also encouraged to liaise with their local flood risk management officers to ensure that they are fully briefed on any issues particularly relevant to their area.

**Emma Baker**  
**Area Director**  
**Wessex**

# Wessex Regional Flood & Coastal Committee Meeting

## 14 January 2020

### Directions to The Guildhall, High Street, Bath, BA1 5AW

#### ***Via train to Bath Spa Rail Station, then walking***

Bath Spa Rail Station is 0.4 mile from The Guildhall, approximately 9 minutes' walk.

Exit station and walk west to Brunel Square, then turn right onto Dorchester Street/A3039. Continue on A3039. Turn left onto Orange Grove/A3039. Turn right onto High Street/A3039. The Guildhall will be on the right.

#### ***There are 3 Park & Ride sites which serve Bath city centre***

Please see the website for information. The city centre stop for Lansdown Park & Ride is nearest to The Guildhall.

<https://travelwest.info/park-ride/bath>

### Car parking near The Guildhall, High Street, Bath BA1 5AW

The closest (and largest) long stay car park, which is run by BANES is:

#### ***Charlotte Street, BA1 2NE***

0.4 mile from the venue (9 minute walk)

Pay and display £9.60 for 6 hours – two of the payment machines take cards, others take coins

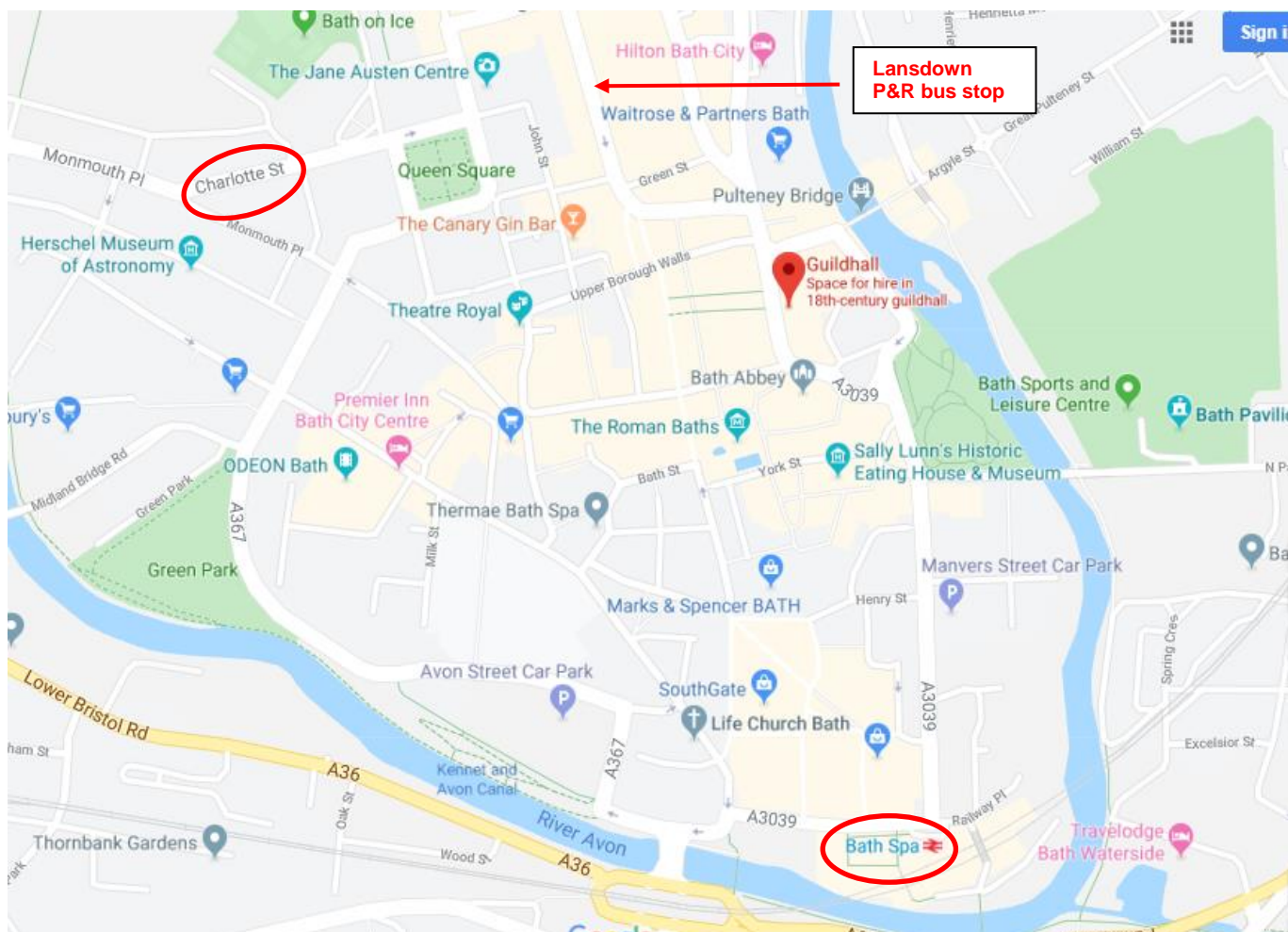
Many of the other car parks shown on the map are short stay or privately owned.

#### ***Driving from the south (Bridport / Dorchester / Yeovil) to Charlotte Street Car Park***

Follow A37 to Bath Road/A367. Continue to follow A367 into Bath, continue onto Chapel Row. Chapel Row turns left and becomes Queen Square/A4. Turn left onto Queen Square Place. Turn right into Charlotte Street Car Park.

#### ***Driving from the west (Taunton / Bridgwater) to Charlotte Street Car Park***

Follow A39 to Bath. Take Bristol Road/A4. Continue on Newbridge Road/A4. Continue on Upper Bristol Road/A4. Turn left, right and left into Charlotte Street Car Park.



# Agenda

The Guildhall, High Street, Bath BA1 5AW  
 Arrivals – Tea / Coffee from 09:30, 10:00 start

Item No.	Item	Lead	Page No.
1	Welcome and Introductions	RFCC Chair	-
2	Apologies for Absence	RFCC Chair	-
3	Declarations of Interest <i>Members to declare interests relating to any of the agenda items</i>	RFCC Chair	-
4	Chair's Update	RFCC Chair	-
5	Groundwater Flood Risk Management (for information)	Rachel Burden	-
6	Area Director's Report (for information)	Emma Baker	-
7	AFCRM Report on Current Issues (for information)	Ron Curtis / Rachel Burden	7
<b>11:15</b>	<b>BREAK</b>		
8	National Paper – 2020/21 FCRM Grant in Aid (GiA) Allocation for Capital and Revenue Funding (for decision)	Ron Curtis	15
9	Finance – 2019/20 In-Year Update (for decision)	Andrew Gill	27
10	Maintenance (for discussion) – A. EA Wessex Maintenance Programme (paper) B. IDB Maintenance Programme (presentation only)	Chris Paul Roger Burge	46
11	National Paper – River Basin Management Plans and Flood Risk Management Plans (Challenges and Choices consultation) (for discussion)	Ron Curtis	69
12	Matters Arising from Information Papers A. FCERM update paper – December 2019 B. ADA RFCC Membership 2020	RFCC Chair	71 78
13	Minutes of Previous Meeting <i>To approve the minutes of the meeting held on 15<sup>th</sup> October 2019</i>	RFCC Chair	81
14	Matters Arising from the Minutes	RFCC Chair	-
15	Any Other Business		-
<b>13:30</b>	<b>MEETING CLOSE AND LUNCH</b>		

# Wessex Regional Flood & Coastal Committee Meeting

## 14 January 2020

### Information Papers

Members are asked to raise any matters arising from the Information Papers under Item 12 on the Agenda or directly with Environment Agency staff.

	Item	Contact for further details	Page No.
A	FCERM Update Paper	Ron Curtis / Rachel Burden	71
B	ADA RFCC Membership 2020	David Jenkins	78

### Dates of future RFCC Meetings

Date	Venue
Tuesday 21 <sup>st</sup> April 2020	Location tbc
Tuesday 21 <sup>st</sup> July 2020	Location tbc
Tuesday 20 <sup>th</sup> October 2020	Location tbc

### Additional information

The following documents are included at the end of the papers:

- Outcome Measures Definitions
- List of Abbreviations

For clarity, all papers are labelled with the one of the following headers:

- **For Information:** This requires no response from the Committee
- **For Discussion:** This may require a response from the Committee but will not be a decision making paper
- **For Decision:** This will require a decision in the form of an approval or consent from the Committee

### Expenses

Members are reminded that expense claims should be submitted within one month of being incurred. Claims covering a period in excess of one month should be avoided. ***Please remember to enclose VAT receipts for all claims (including VAT fuel receipts for mileage)***, as the finance team will not be able to process the claim without full documentation.

Members expense claim forms should be returned to: Wessex Regional Flood and Coastal Committee Services, Environment Agency, Rivers House, Sunrise Business Park, Higher Shaftesbury Road, Blandford Forum, DT11 8ST

<b>Item 7 – AFCRM Report on Current Issues</b> <b>Paper for: Information</b>
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**Appendix 1: Strategy Dashboard**

**Paper by: Ron Curtis and Rachel Burden**

**Subject: Area Flood & Coastal Risk Managers Report on Current Issues**

<p><b>Recommendation:</b></p> <p style="margin-left: 40px;">The Committee are asked to</p> <ul style="list-style-type: none"><li>• note the latest Wessex Flood and Coastal Risk Management news and updates</li></ul>
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**1.0 Introduction**

This paper highlights some of the key FCRM work in Wessex over the last 3 months and provides a brief update on some Priority Places projects.

**2.0 Current water situation and incident response**

Across the country, autumn 2019 has been reported as the fifth wettest on record. We have already seen widespread flooding in the North of England. Catchments in Wessex began to wet up earlier than in previous years, as a result of a succession of steady rainfall events during late October and into November. From mid-November onwards an increasing frequency of intense frontal systems had led to Wessex catchments becoming saturated. Widespread flood alerts and targeted flood warnings are now being issued regularly following the passage of each new frontal system.

Despite summer groundwater levels being lower than the long term average, groundwater recharge started in October this year, which is earlier than usual. This early recharge has resulted in higher than average groundwater levels during December, with some winterbournes running much earlier than usual. In particular the Till in Wiltshire, started to flow in mid-December, 6 weeks earlier than would ordinarily be expected. With 3 alerts and 18 warnings already issued, staff are carefully monitoring groundwater levels and taking this valuable opportunity to validate the recently introduced Groundwater Flood Warning Service.

**3.0 Tidal Situation**

The North Somerset coast has not been adversely impacted during this period. We have seen flood alerts issued on a number of occasions for Porlock Bay and Dunster. Storm Atiyah coincided with neap tides and again there was little impact other than a couple of precautionary flood warnings.

On the Dorset coast, the recently completed West Bay sea defences (groin on West Beach and rock armour on East Beach) have been tested this autumn by several long period swell wave events and strong winds. To date the defences have proved to be very effective.

**4.0 Incident Response**

Throughout October we continued to focus on ensuring that we were ready for any impacts on the environment from an EU No Deal exit. This work will be revisited early in the New Year.

We also provided a lot of aid, in terms of staff and equipment, to support the major flooding event in the North of the country.

<b>Item 7 – AFCRM Report on Current Issues</b> <b>Paper for: Information</b>
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We have in place a winter preparedness plan, to ensure we are as ready and resilient as we can be for any incidents this winter. The plan focusses on all types of flooding and any associated incidents. We have put additional rosters in place to support our response during the December holiday period.

## **5.0 Bridgwater Tidal Barrier**

The Environment Agency (EA) and Sedgemoor District Council (SDC) continue working in partnership to deliver the Bridgwater Tidal Barrier Scheme by 2024, subject to funding and statutory approvals. The project will reduce tidal flood risk to 11,300 homes and 1,500 businesses.

The Transport and Works Act Order (TWAO) plans and documents, including our Environmental Impact Assessment (EIA) and Environmental Statement (ES) were submitted to the Secretary of State for the Environment on 19 December. The TWAO is the means through which legal powers can be granted to construct the scheme. It is required due to restrictions on navigation on the River Parrett when the barrier is closed. We have issued legal notices under the TWAO to all statutory consultees including landowners affected by the scheme proposals. Submission of the TWAO starts a formal period for representations (19 December to 13 February 2020), where support or objection to the scheme should be sent to the Secretary of State.

We continue consulting with landowners to secure agreements for permanent and temporary land, access and borrow pit material to build the downstream defences. We are seeking opportunities with landowners to deliver wetland habitat enhancements through the borrow pits. We have also completed further ground investigations at the barrier site using specialist floating plant.

SDC has appointed the Wildfowl & Wetlands Trust to help bid and secure funding to deliver wider enhancements alongside the scheme.

Somerset County Council and SDC submitted a Housing Infrastructure Funding (HIF) bid back in March, which included a bid for some funding for the barrier. Due to the election Homes England have delayed the outcome of the bid until early in the New Year.



*Indicative visualisation of the Bridgwater Tidal Barrier*

## **6.0 Taunton Strategic Flood Risk Improvement Project**

Over the past several years we have been working in partnership with Somerset West and Taunton Council (SWT) to understand the impact of flood risk in and around Taunton, both now and into the future with climate change projections. A jointly agreed long-term strategic plan outlining our preferred option for managing flood risk has been prepared. The preferred option will include new, improved or raised flood defence walls and banks, flood storage areas, and potential river restoration improvements. The detail of the plan will be presented at the April 2020 committee meeting, provided Somerset West & Taunton Council (SWT) complete their Executive Committee approvals process in January/February 2020.



<b>Item 7 – AFCRM Report on Current Issues</b> <b>Paper for: Information</b>
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## **7.0 Corsham Culvert Collapse**

Following the recent partial collapse and subsequent fix of the culverted Byde Mill Brook in Corsham, the Environment Agency is leading the development of a business case to review strategic options to reduce flood risk from the Byde Mill Brook, alongside repairs to the culvert.

Since the culvert collapse we have identified the various riparian owners of the culvert and outlined their responsibilities. This has been done through a number of one to one meetings with tenants, home owners, housing associations, Wiltshire Council and other professional partners and has needed to be sensitively managed.

Meetings with riparian owners are now complete and we are preparing for a community event in February 2020. We are working closely with professional partners including Wiltshire Council, Wessex Water, and Network Rail. Network Rail will be a major beneficiary of any scheme progressed, including the fix to the culvert. The main Bristol to London railway line, which flooded in September 2014, was closed for 1 day. Initial meetings have been held with Network Rail to discuss possible contributions. A joint newsletter to all of the riparian owners is currently being drafted and will be sent from all professional partners, demonstrating our commitment to work together to determine suitable measures to help reduce flood risk.

## **8.0 Palmers Brewery**

Palmers Brewery flood defence wall, Bridport, reduces the risk of flooding to 19 high risk and 184 medium risk properties and was identified as failing through our asset inspection program. A contingency plan was put in place to manage the risks of the asset failing. Working with our contractor TVO a design was developed to stabilise the wall and install deep drainage, at a cost of £268k. During site works in November the wall failed, requiring our contingency and risk management plans to be put in place. The current situation is as follows:

- a new piled wall defence which will ultimately form part of the long term solution has been installed.
- we have removed some of the on-site temporary access platforms to increase the capacity of the river over Christmas.
- we continue to work with the Local Authority and our internal partners to ensure we remain compliant in terms of planning and managing environmental risk.
- we have provided our Programming team with indications that the works will increase the cost to deliver this project to £750k plus risk.
- we continue to provide ongoing protection to the Bridport community.



*Palmer's Brewery wall failure*

<b>Item 7 – AFCRM Report on Current Issues</b> <b>Paper for: Information</b>
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## **9.0 Salisbury**

Central government have released funds to regenerate both Salisbury city centre, and Wiltshire Council's ambition for the city is to be "blue, green and clean". We have seized the opportunity to be involved and our integrated partnership means working together to deliver results on a scale that would not be possible independently. Regular and close engagement with the Council has enabled us to significantly influence their Master plan, with the inclusion of a 40m wide, greener, River Avon corridor in the heart of the city centre.

The Outline Business Case (OBC -outline design) phase is well underway with more detailed modelling now demonstrating the viability of the overall scheme. The design team remain busy integrating flood risk, river improvements, floodplain and amenity benefits and a whole host of other aspects into the plans for the area. A number of design workshops have been undertaken.

The Council are due to take the lead on the project following the OBC phase, which is due for submission in late spring. They will integrate the river works into their wider plans for the city. Construction of the river works will be post 2020, although other Council development works and enabling works will precede this.

## **10.0 Two Valleys Slow the Flow: Natural Flood Management – Monksilver & Doniford Catchments (Williton)**

We are working in partnership with the Wildfowl and Wetland Trust to deliver the Defra funded NFM scheme in the Monksilver and Doniford catchments. Works are progressing well with several key NFM sites delivered so far in 2019/20, and further sites and interventions programmed for delivery in 2020/21. In October we also had a very successful community and stakeholder event in Williton, to promote the project and seek wider collaboration.

In summary, so far we have delivered:

- 1,150 trees planted across three different farm sites, to intercept and increase rainfall infiltration, and slow overland runoff.
- 8 runoff attenuation ponds, across four different sites, including a floodplain woodland storage pond and habitat area.
- 1,000m of new hedgerow planting, across three different sites, to slow overland surface runoff and provide habitat.
- 44 leaky woody dams, across five different sites, to slow stream flow and improve in-channel habitat and morphology.

## **11.0 Working with our Risk Management Authority Partners**

### **Somerset and West Taunton District Council - Watchet Quay Wall Failure:**

In mid-December a section of the quay wall at Watchet failed over a length of approximately 20m, to leave a hole approximately 6m in diameter. It also washed away and undermined an area of the quay surface. Other than the prevailing wind/tide/wave conditions during that period, there was no other obvious reason for this failure. The wall had previously appeared to be in a sound condition.

The wall is part of the harbour and coast protection assets, which provide shelter for the marina, and flood and coastal erosion protection for the town. The wall, along with the surrounding quays are owned by Somerset West and Taunton Council. The Council are leading on emergency works to stabilise the failure and prevent a total breach, which would allow waves directly into the marina and isolate the East Pier.

<b>Item 7 – AFCRM Report on Current Issues</b> <b>Paper for: Information</b>
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As well as providing technical support, the Environment Agency has supplied Legato blocks and sand bags to be placed on the quayside and act as a temporary flood defence. We have also made our emergency works framework contractors Kier and consultant Black and Veatch available to the Council, and they are carrying out the emergency works. This is a short term repair until plans for a full repair can be drawn up and implemented.



#### **12.0 Strategy Dashboard**

The Strategy Dashboard is presented in Appendix 1.

#### **13.0 Recommendation:**

The Committee are asked to

- Note the latest Wessex Flood and Coastal Risk Management news and updates

**Ron Curtis & Rachel Burden**  
**Area Flood & Coastal Risk Managers, Wessex**  
**20 December 2019**

<p><b>Item 7 – AFCRM Report on Current Issues</b> <b>Paper for: Information</b></p>
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# 2016 – 2021 Wessex Strategy Dashboard

December 2019 update

WESSEX AREA COVERS APPROXIMATELY  
**10,978km<sup>2</sup>**

POPULATION  
(2001 census)  
**2.61million**



LENGTH OF COASTLINE

**522.5km**

LENGTH OF MAIN RIVER

**2,833km**



% OF COASTLINE AT EROSION RISK

**46%**

LENGTH OF ORDINARY  
WATERCOURSE

**12,531km**

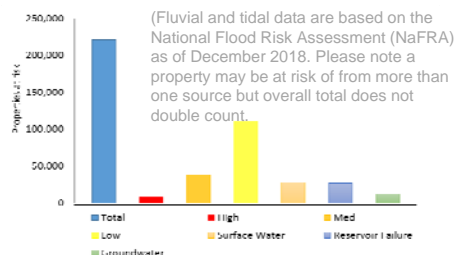
LENGTH OF RAISED DEFENCES

EA **453km**

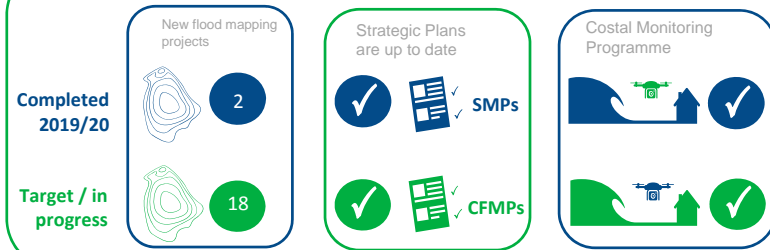
LA **22km**

3<sup>rd</sup> PARTY **56km**

## PROPERTIES AT RISK FROM FLOODING

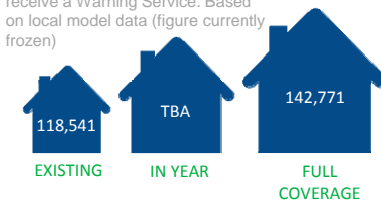


## BETTER EVIDENCE



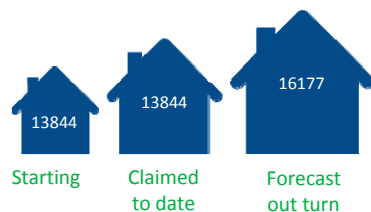
## FLOOD WARNING

Number of properties in FZ2 to receive a Warning Service. Based on local model data (figure currently frozen)

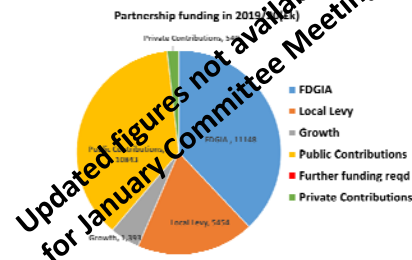


## HOUSES BETTER PROTECTED

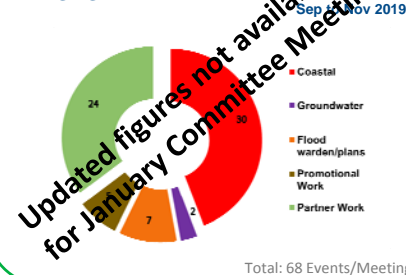
Cumulative OM2 and OM3 2015/16 to 2020/21



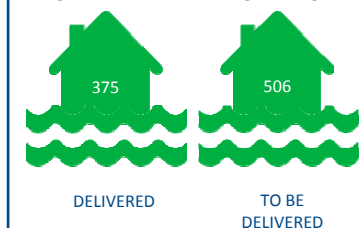
## PARTNERSHIP FUNDING



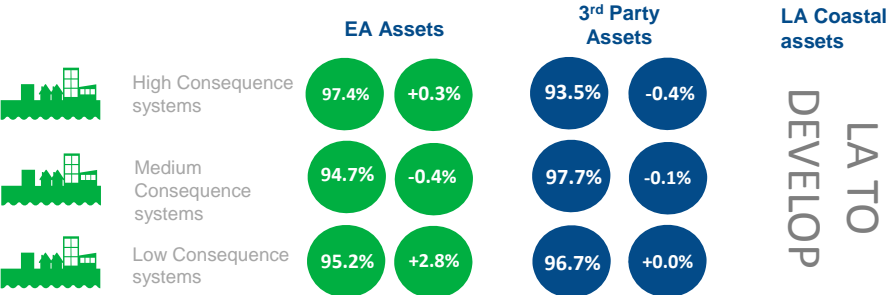
## COMMUNITY AND PARTNERSHIP ENGAGEMENT



## PROPERTY LEVEL RESILIENCE



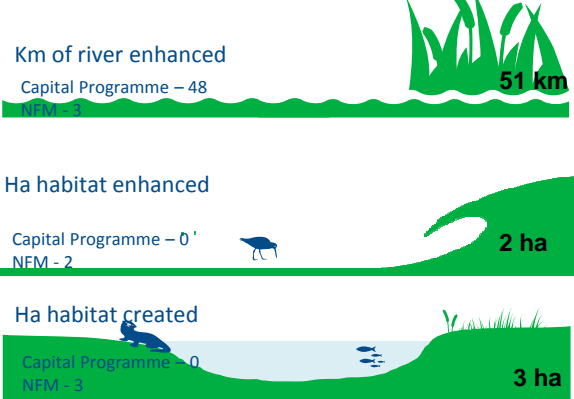
ASSET MANAGEMENT  
(% of assets at target condition)



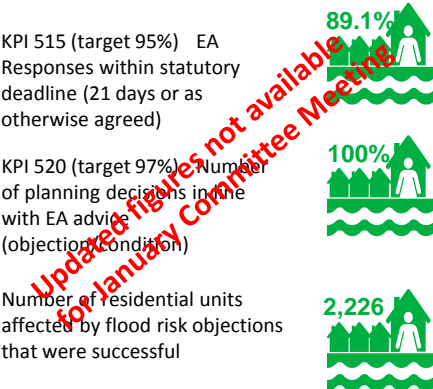
FLOOD PLANNING



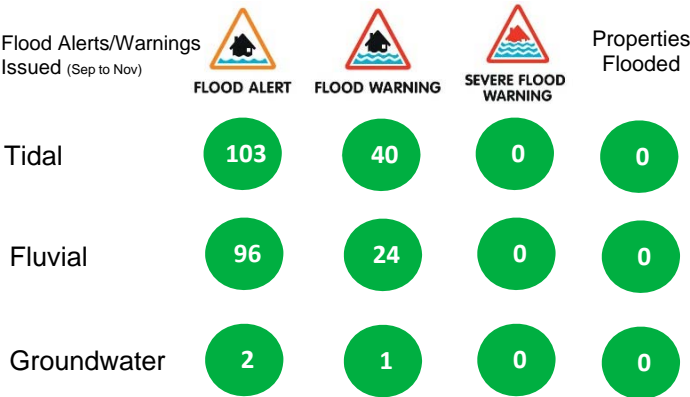
ENVIRONMENTAL IMPROVEMENTS  
related to Defra Headline Outcome Measure



PLANNING ADVICE (Sep - Nov 19)



FLOOD WARNINGS



**ITEM 8 – National Paper: 2020/21 Flood and Coastal Risk Management (FCRM) Grant in Aid (GiA) allocation for capital and revenue funding**  
**Paper for: Decision**

**Appendix A:** *FCRM allocation principles*

**Appendix B:** *Indicative capital allocation*

**Appendix C:** *Indicative revenue maintenance allocations*

**Appendix D:** *Revenue maintenance programme – type of work*

**Appendix E:** *Annual allocation funding cycles for RFCC's – a simple guide*

**Appendix F:** *Wessex Indicative Final Programme*

**Paper by: Director of FCRM Allocation and Asset Management**

**Subject: 2020/21 Flood and Coastal Risk Management (FCRM) Grant in Aid (GiA) allocation for capital and revenue funding**

**Recommendations:**

The RFCC Committees are asked to:

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, and Appendix F).
3. To **review** and **consent** the final draft indicative allocations for FCRM revenue GiA funding (Appendix C).

**Headline messages:**

- This paper asks Committees to discuss and consent their capital and revenue indicative allocations for 2020/21.
- As in previous years, the capital programme is being prioritised by homes better protected.
- The Wessex RFCC 2020/21 FDGiA Capital allocation is the same as presented to the Committee in the October Local Choices meeting. Full details are included in Appendix F.
- 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.

**ITEM 8 – National Paper: 2020/21 Flood and Coastal Risk Management  
(FCRM) Grant in Aid (GiA) allocation for capital and revenue funding  
Paper for: Decision**

**1.0 Introduction**

- 1.1 This paper is the final stage in allocating FCRM GiA for financial year 2020/21. This will be the final year of the current 6 year capital investment programme.
- 1.2 The detail of this 2020/21 allocation for the Wessex Committee can be found in appendix F.
- 1.3 The Committees are asked to review and consent their final draft indicative allocations for next financial year.
- 1.4 In building the indicative allocations, the allocation principles and Defra's Partnership Funding Policy have been applied. They are the allocation principles reviewed by the Committees and approved by the EA Board on 7 February 2019 (Appendix A), and remain unchanged from last year.
- 1.5 As of the end of October 2019 (quarter 2 of this financial year) we have achieved 200,425 homes better protected since the start of the 6 year capital programme in 2015.
- 1.6 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.

**2.0 FCRM Grant in Aid capital allocation**

- 2.1 Table 1 shows the capital profile for the final year of the current 6 year programme, and 2019/20 for reference. As noted at the last meeting, this now includes the additional £62.4m funding uplift (announced on 10 September) which benefits 5 RFCC Committees (detailed in the October 2019 Committee paper).

Table 1: FCRM GiA capital funding profile, £m

	<b>Year 5 2019/20</b>	<b>Year 6 2020/21</b>
Pre-Autumn Budget 2017	£463.0	£451.0
Additional funding to accelerate schemes	£18.0	£8.0
Additional funding for deprived communities	£20.0	£10.0
Additional funding uplift September 2019	n/a	£62.4
<b>Revised profile</b>	<b>£501.0</b>	<b>£531.4</b>
Forecast 'most likely' homes better protected	251,000 homes	315,000 homes

- 2.2 As in previous years, the programme is being prioritised by homes better protected to ensure we meet our 300,000 homes target by 31 March 2021.



**ITEM 8 – National Paper: 2020/21 Flood and Coastal Risk Management (FCRM) Grant in Aid (GiA) allocation for capital and revenue funding**  
**Paper for: Decision**

- 2.3 The National Portfolio Management Office (PMO) undertook a national prioritisation exercise which showed that the homes target would best be achieved through retaining, as close to possible, the indicative allocations for 2020/21. These were provided as part of the 2019/20 refresh (shared with RFCC Committees in January 2019) and agreed at the EA Board on 7 February 2019.
- 2.4 We have been able to take this approach for 2020/21 as previous annual allocations have ensured that money has been fairly distributed across the RFCCs in the best way to achieve at least 300,000 homes better protected. This is good news as it allows Area teams the freedom to operate within this framework to ensure they manage their programmes and 2019/20 and 2020/21 budgets to achieve the target and provides a more stable programme. This should limit significant funding changes between the Committees.
- 2.5 Prioritising by homes maximises the likelihood of achieving our 300,000 homes target within the current allocation. The draft indicative capital programme for review and consent has been prioritised using the following approach:
- Projects in construction by 1 October 2019 and statutory and legal ‘must do’s’
  - Projects better protecting homes by 2021, then
  - Projects better protecting homes beyond 2021, prioritised by Partnership Funding score

Local Choices

- 2.6 The draft indicative programme was shared with RFCCs at their October ‘local choices’ meetings. Local choices enable RFCCs to make changes to the programme within their funding allocation. They must maintain or increase the ‘most likely’ forecast of homes better protected.
- 2.7 Following these meetings and submission of all local choice returns back to the national PMO we can now provide the draft final indicative allocations. All local choices which met the criteria set out in the October paper have been approved and built into the Committee’s allocations.
- 2.8 Our updated ‘most likely’ forecast, taking into account delivery confidence of individual schemes, is 315,000 homes better protected by the end of the 6 year programme.
- 2.9 A table showing the allocation by RFCC for 2020/21 for schemes and support schemes can be found in Appendix B. The table also shows each RFCC’s contribution to the homes better protected target.
- 2.10 Our focus remains on achieving our fixed 300,000 homes better protected target by end of March 2021. This focus on a shorter term goal means that the programme is in essence now a 15 month programme. Ideally it would consist of a blend of projects at different stages of development to manage flood and coastal erosion risk into the future. However, with the current pressure on budgets, we are funding less projects that will input into the future programme beyond March 2021.

**ITEM 8 – National Paper: 2020/21 Flood and Coastal Risk Management (FCRM) Grant in Aid (GiA) allocation for capital and revenue funding**  
**Paper for: Decision**

Settlement conditions

- 2.11 In line with our settlement condition for the 6 year programme we would expect to see 10% efficiency savings on the £531m allocation for 2020/21. If half of this £53m were cash releasing, this would free up £26.5m to reinvest in schemes to help manage any in-year financial pressures.
- 2.12 The overall partnership funding contributions required to achieve the 300,000 homes better protected target for the 6 year programme is in the range of £550m to £600m, of which £561m has already been secured. Achievement of 30,000 homes of the 339,000 maximum possible homes are dependent on £30m-£40m of contributions which remain to be secured. We are actively managing this and it is likely that some schemes which cannot secure the required partnership funding will achieve their homes early in the next programme. We welcome the RFCC Committees continued support in securing partnership funding contributions.

**3.0 Asset management revenue maintenance programme**

- 3.1 Based on the planning assumption that we will get a roll-forward budget for 2020/21 we will invest £110m into our Field Operations teams and maintenance programme.
- 3.2 Over a number of years we have been moving towards a position where all RFCCs are funded to the same level of asset risk as defined in our Asset Information Management System (AIMS). We are now close to achieving this. In previous years we have capped decreases at 10% per year. The maximum decrease for any RFCC Committee is 9% for 2020/21.
- 3.3 The indicative allocation to RFCCs for Area Operations Services teams and maintenance programmes are provided in Appendix C. Details of the type of work contained within the indicative revenue maintenance programme is provided in Appendix D. Further information is provided in Item 9 Wessex Maintenance Programme.

**4.0 Recommendations**

**Recommendations:**

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, and Appendix F).
3. To **review** and **consent** the final draft indicative allocations for FCRM revenue GiA funding (Appendix C).

**Ken Allison Director FCRM Allocation and Asset Management**  
**17 December 2019**

**Item 8 – Appendix A: FCRM allocation principles**

Protect people and homes

- Deliver the £2.6bn six year capital programme
- Increased protection for at least 300,000 homes between 2015/16 and 2020/21
- Protect maintenance funding in real terms and re-invest 10% efficiency savings
- Take a risk-based approach to securing the condition of existing assets including channel conveyance
- Maintain our ability to warn people and respond to incidents so as to save lives and property
- Support the provision of property scale resistance and resilience measures

Working in partnership

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

Way we work

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

# Wessex Regional Flood and Coastal Committee Meeting

14 January 2020

## Item 8 – Appendix B: FCRM GiA indicative capital allocation for schemes and support schemes

RFCC	2019/20 Opening Allocation <sup>1</sup>		2020/21 Current published programme indicative allocation <sup>2</sup>		2020/21 Refresh indicative allocation Post Local Choices <sup>3</sup>		Difference Post Local Choice vs indicative allocation for 2020/21		Programme forecast 2020/21	Indicative allocation for support schemes 2020/21 <sup>4</sup>	Total final indicative allocation for 2020/21 <sup>5</sup>
	£m	Max homes	£m	Max homes	£m	Max homes	£m	Max homes	Most likely homes	£m	£m
Anglian Eastern	35.5	4,620	16.1	2,858	32.0	5,346	15.9	2,488	3,782	1.8	33.8
Anglian Great Ouse	13.1	394	18.7	1,557	26.1	2,247	7.4	690	1,793	0.4	26.5
Anglian Northern	57.6	16,871	19.3	5,133	46.6	21,281	27.3	16,148	17,518	1.3	47.9
English Severn and Wye	3.4	969	1.5	396	1.8	852	0.3	456	543	1.5	3.3
North West	56.9	5,624	73.1	6,194	65.1	5,120	-8.0	-1,074	4,800	3.3	68.4
Northumbria	10.1	1,167	5.5	1,118	13.1	1,502	7.6	384	1,067	0.8	13.9
South West	22.5	2,088	20.6	1,050	19.9	2,055	-0.7	1,005	1,315	2.3	22.2
Southern	42.1	12,914	62	13,940	60.9	12,457	-1.1	-1,483	7,998	3.3	64.2
Thames	48.7	6,267	29.9	5,860	39.6	5,959	9.7	99	3,041	2.1	41.7
Trent	50	2,481	37.2	10,318	39.5	11,407	2.3	1,089	7,704	1.0	40.5
<b>Wessex</b>	<b>9.1</b>	<b>1,125</b>	<b>13.1</b>	<b>1,286</b>	<b>12.2</b>	<b>1,730</b>	<b>-0.9</b>	<b>444</b>	<b>1,338</b>	<b>1.4</b>	<b>13.6</b>
Yorkshire	95.3	23,572	104.4	18,205	102.6	21,904	-1.8	3,699	17,827	2.7	105.3
<b>Total</b>	<b>444.3</b>	<b>78,092</b>	<b>401.4</b>	<b>67,915</b>	<b>459.4<sup>3</sup></b>	<b>91,860</b>	<b>58.0</b>	<b>23,945</b>	<b>68,726</b>	<b>21.9</b>	<b>481.3</b>

1. Includes over-allocation of £15.4m. Budget for 2019/20 was amended in Q1 2019/20 to ensure programme remained affordable.
2. Indicative allocation for 2020/21 given as part of the 2019/20 allocation agreed at EA Board on 7 February 2019.
3. £2m for Adaptive Pathways is yet to be allocated.
4. Support schemes are projects which provide wider FCRM benefits, such as mapping and modelling, incident management, hydrometry and telemetry.
5. Total is 2020/21 Refresh indicative allocation post Local Choices plus final allocation for support schemes.

**Item 8 – Appendix C: FCRM GiA indicative revenue maintenance allocations for 2020/21 and 2021/22**

<b>RFCC</b>	<b>2019/20 Allocation, £k</b>	<b>2020/21 Indicative Allocation £k</b>	<b>2021/22 Indicative Allocation £k</b>
Anglian Great Ouse	4,770	4,542	4,087
Anglian Eastern	8,698	8,450	7,955
Anglian Northern	10,287	10,755	10,426
North West	10,645	10,950	11,700
Northumbria	2,475	2,549	2,500
Severn & Wye	4,833	4,411	4,043
South West	5,119	5,004	4,630
Southern	11,276	10,964	10,405
Thames	19,399	20,027	21,021
Trent	12,335	12,730	14,164
<b>Wessex</b>	<b>7,729</b>	<b>7,420</b>	<b>6,870</b>
Yorkshire	12,434	12,198	12,198
<b>Total</b>	<b>110,000</b>	<b>110,000</b>	<b>110,000</b>

**Wessex Regional Flood and Coastal Committee Meeting**  
**14 January 2020**

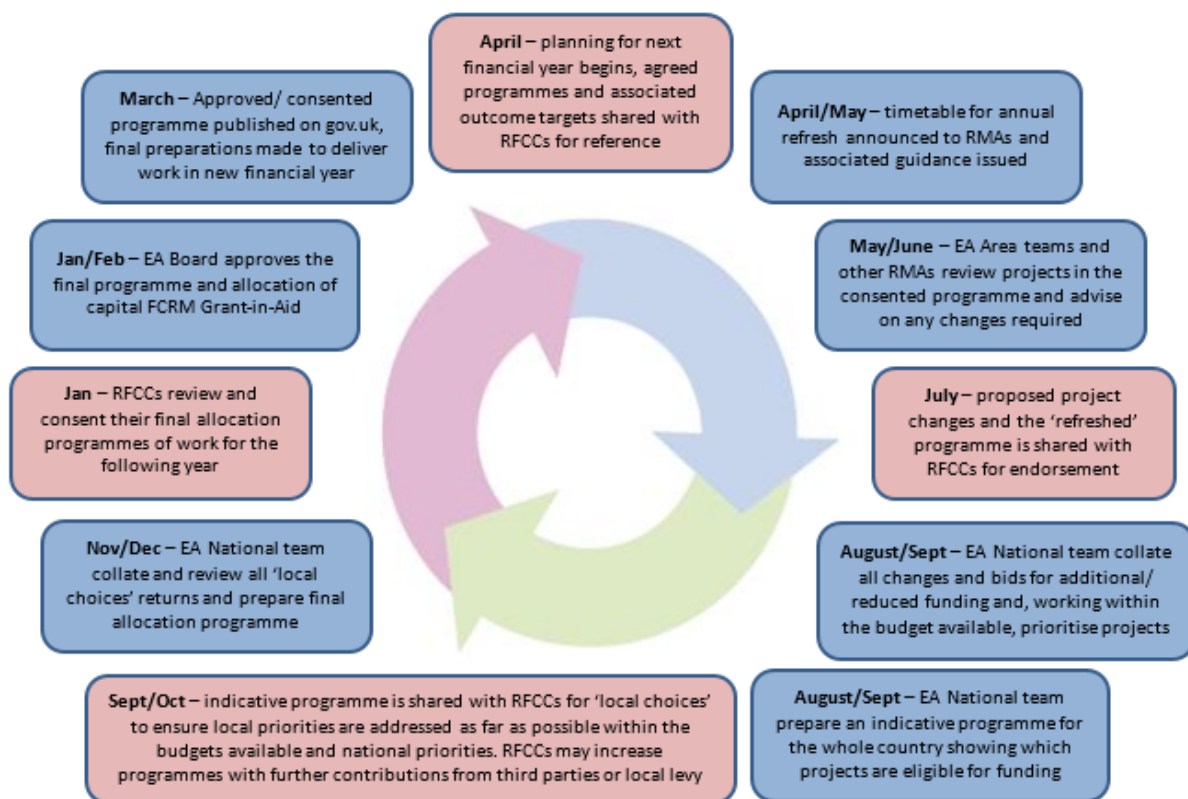
**Item 8 – Appendix D: Revenue maintenance programme – type of work**

RFCC	Yr	System Risk	Type of Work - Value (£k)													
			Dredging	Maintain Conveyance	Maintain Raised Defences	Maintain Structures	MEICA	Operation	Other	Survey / Inspection	Statutory Inspection	Channel Repairs	Coastal Repairs	Raised Defence Repairs	Structure Repairs	Unscheduled
Wessex	20/21	High	78	1,142	1,695	674	247	145	220	139	39	12	214	388	184	1029
		Medium	1	173	85	50	24	5	63	19	-	-	-	63	28	
		Low	-	136	224	47	30	3	22	6	-	-	-	3	-	

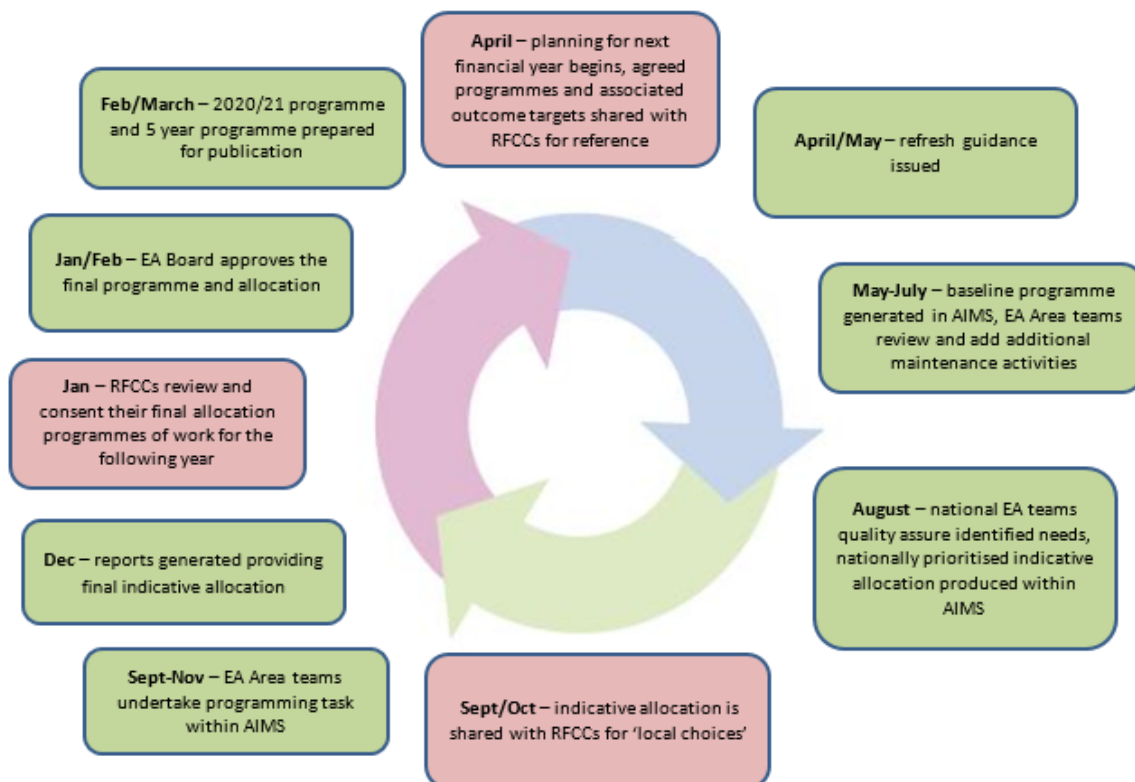
\* In addition, Revenue Maintenance Support Scheme - £233k

**Item 8 – Appendix E: Annual allocation funding cycles for RFCCs – a simple guide**

**Annual process for allocating capital funding**



**Annual process for allocating revenue funding**



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Item 8 - Appendix F: Wessex Indicative  
Final Programme

REFERENCE	ORGANISATION	PROJECT TOTALS(calculated from relevant columns)£ CASH											TOTAL PROJECT EXPENDITURE								
													(calculated from FCRM GiA to be expended + Total Local Contributions Secured + Funding)								
													Pre Yr 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
Project Name	Lead Risk Management Authority - Name	Total Project Expenditure - PROJECT TOTAL	Grant in Aid - PROJECT TOTAL	Growth - PROJECT TOTAL	Local Levy - PROJECT TOTAL	Internal Drained Board Precept - PROJECT TOTAL	Public Contributions - PROJECT TOTAL	Private Contributions - PROJECT TOTAL	Other EA Contributions - PROJECT TOTAL	Further Contributions Required - PROJECT TOTAL	OM2 - PROJECT TOTAL	OM3 - PROJECT TOTAL	TPE - PREVIOUS YEARS £	TPE - 2015/16 £	TPE - 2016/17 £	TPE - 2017/18 £	TPE - 2018/19 £	TPE - 2019/20 £	TPE - 2020/21 £	TPE - 2021/22 onwards £	
Allington Surface Water Improvements	Dorset Council	648,019	119,643	0	0	0	0	0	0	528,376	26	0	0	0	0	0	0	20,000	628,019		
Avon Beach and Friars Cliff Groyne Replacement Scheme	BCP Council	3,040,000	1,100,000	0	40,000	0	0	0	0	1,900,000	0	50	0	0	0	0	0	0	3,040,000		
Avonmouth Severnside Enterprise Area (ASEA) Ecology Mitigation and Flood Defence Project	South Gloucestershire Council	102,384,000	32,584,000	0	4,000,000	0	65,800,000	0	0	0	1,052	0	0	0	0	1,900,000	5,676,100	26,715,500	68,092,400		
Bath Flood Defence Scheme (Twerton gate replacement)	Environment Agency	8,208,086	6,548,086	0	1,620,000	0	40,000	0	0	0	773	0	0	0	40,000	46,670	737,416	703,000	2,620,000	4,061,000	
Bath Flood Risk Management Project	Bath and North East Somerset Council	7,280,000	610,000	0	570,000	0	6,100,000	0	0	0	60	0	950,000	1,961,000	3,381,000	988,000	0	0	0	0	
Beaminster Spillway and Gabion (Section12)	Environment Agency	435,000	435,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25,000	410,000		
Blind Yeo Asset Improvements	Environment Agency	2,125,686	2,125,686	0	0	0	0	0	0	0	2,825	0	0	2,863	67,725	159,453	1,475,944	340,701	74,000	5,000	
Bournemouth Beach Management Phase 1	BCP Council	17,081,733	14,481,733	0	1,000,000	0	1,600,000	0	0	0	0	1,597	230,000	5,927,233	5,269,000	2,942,500	1,630,000	1,083,000	0	0	
Bradford -on-Avon Flood Alleviation Scheme	Environment Agency	4,538,000	1,165,000	0	495,000	0	300,000	0	0	2,578,000	33	0	0	42,000	55,000	29,000	16,796	125,000	156,000	4,114,204	
Bradpole surface water and groundwater improvements	Dorset Council	168,800	0	0	120,000	0	48,800	0	0	0	0	0	0	0	0	0	15,000	83,800	70,000	0	
Bridgwater Tidal Barrier Flood Defence Scheme	Environment Agency	108,261,000	82,261,000	0	4,000,000	0	22,000,000	0	0	0	2,449	0	136,000	188,000	929,000	1,129,000	2,100,000	3,368,000	926,000	99,485,000	
Brislington Flood Defence Scheme Improvements	Environment Agency	1,944,291	945,291	0	999,000	0	0	0	0	0	116	0	0	5,000	34,640	39,826	198,000	758,291	908,534	0	
Bristol Avon Strategy	Bristol City Council	76,032,000	43,355,000	10,000,000	2,040,000	0	737,000	0	0	19,900,000	52	0	15,000	140,000	282,000	40,000	350,000	200,000	250,000	74,755,000	
Bristol Frome Refurbishment Project (Eastville to City Centre)	Environment Agency	15,300,000	15,300,000	0	0	0	0	0	0	0	1,900	0	0	0	0	0	20,000	30,000	0	15,250,000	
Cannington FDS	Environment Agency	5,360,344	1,946,589	0	2,169,322	0	440,000	804,433	0	0	116	0	454,191	613,000	3,135,482	913,397	73,685	170,589	0	0	
Cerne Spillway and gabion replacement (Section 10)	Environment Agency	452,700	452,700	0	0	0	0	0	0	0	220	0	0	0	0	7,700	0	45,000	400,000	0	
Charminster	Environment Agency	688,619	37,795	0	275,824	0	375,000	0	0	0	12	0	176,869	448,400	63,350	0	0	0	0	0	
Chippenham	Environment Agency	4,000,000	900,000	0	0	0	0	0	0	3,100,000	375	0	0	0	0	0	0	0	0	4,000,000	
Chitterne Attenuation of Surface Water	Wiltshire Council	135,000	45,000	0	45,000	0	45,000	0	0	0	19	0	0	0	0	0	0	0	0	135,000	
Com NFM - Upper Piddle Headwaters	Dorset Council	50,000	0	50000	0	0	0	0	0	0	0	0	0	0	0	0	1,800	30,000	18,200	0	
Congresbury Yeo Tidal Banks	Environment Agency	4,039,000	4,039,000	0	0	0	0	0	0	0	4,101	0	553,000	2,840,000	532,000	100,000	5,000	5,000	4,000	0	
Corsham flood alleviation (EA Led)	Environment Agency	630,000	200,000	0	240,000	0	190,000	0	0	0	19	0	0	0	0	0	0	30,000	0	600,000	
Creekmoor Flood Defences	BCP Council	210,000	175,000	0	0	0	20,000	15,000	0	0	31	0	0	0	0	80,000	130,000	0	0	0	
Cribbs Causeway Reservoir: Measures in the Interest Of Safety	Environment Agency	558,069	558,069	0	0	0	0	0	0	0	0	0	0	0	0	0	75,401	482,668	0	0	
Cumberland Road	Bristol City Council	1,000,000	250,000	0	80,000	0	670,000	0	0	0	124	0	0	1,000,000	0	0	0	0	0	0	
Curry Moor Flood Storage Reservoir Section 10 Improvements	Environment Agency	2,698,000	2,698,000	0	0	0	0	0	0	0	0	0	150,000	750,000	1,500,000	75,000	23,000	200,000	0	0	
Curry Moor Flood Storage Reservoir Section 10 Improvements 2020+	Environment Agency	650,000	650,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,000	550,000	
Dalby Avenue Trash Screen Improvements	Environment Agency	500,000	50,000	0	0	0	150,000	300,000	0	0	20	0	0	0	0	0	0	0	0	500,000	
Dorchester FDS Improvements	Environment Agency	1,525,000	387,387	0	210,000	0	0	0	0	927,613	24	0	0	2,233	58,234	93,522	25,585	10,000	0	1,335,426	
Dorset PLP	Dorset Council	674,000	264,000	0	350,000	0	60,000	0	0	0	94	0	377,000	297,000	0	0	0	0	0	0	
Dunball Sluice Gates Refurbishment	Environment Agency	1,776,147	765,000	0	468,647	0	542,500	0	0	0	70	0	0	0	3,010	27,738	55,609	89,790	0	1,600,000	
Eastville FDS – Timber Supports and Canalised Sections Assessments	Environment Agency	410,000	410,000	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	10,000	400,000	
Fleetsbridge & Hatch Pond Poole Flood Attenuation	BCP Council	1,000,000	880,000	0	0	0	60,000	60,000	0	0	142	0	0	0	0	0	0	0	0	1,000,000	
Flights Hole Weir Fish Pass Improvements	Environment Agency	607,983	537,983	0	70,000	0	0	0	0	0	0	0	268,625	0	0	124,212	178,098	17,048	20,000	0	
French Weir Remedials, River Tone	Environment Agency	715,763	715,763	0	0	0	0	0	0	0	0	0	86,032	0	0	0	600,167	29,564	0	0	
Gang Wall Reservoir: Measures in interests of safety under Reservoirs Act	Environment Agency	99,000	99,000	0	0	0	0	0	0	0	0	0	0	0	0	14,200	43,000	10,000	31,800	0	
Gold Corner Pumping StationImprovements	Environment Agency	327,725	208,586	0	119,139	0	0	0	0	0	15	0	0	0	156,664	171,061	0	0	0	0	
Gooseum Rhynne Reservoir: Measures in the Interest Of Safety	Environment Agency	880,742	880,742	0	0	0	0	0	0	0	0	0	0	0	0	14,262	82,175	203,305	552,000	29,000	
Hamworthy and Upton FDS	BCP Council	320,000	305,000	0	0	0	0	15,000	0	0	130	0	0	0	0	0	40,000	280,000	0	0	
Holes Bay SPA Restoration	BCP Council	510,000	340,000	0	60,000	0	0	110,000	0	0	0	15	0	0	0	0	60,000	0	0	450,000	
Huckers Bow Tidal Outfall Replacement	Environment Agency	2,286,500	2,272,000	0	0	0	14,500	0	0	0	286	0	0	31,000	117,000	39,000	1,789,500	300,000	10,000	0	
Kingston Seymour Asset Improvements	Environment Agency	293,109	225,509	0	67,601	0	0	0	0	0	103	0	0	0	126,463	166,647	0	0	0	0	
Longmoor Tunnel Refurbishment	Environment Agency	1,378,052	1,053,273	0	324,779	0	0	0	0	0	500	0	0	0	52,653	77,248	1,118,151	55,000	70,000	5,000	
Lower Axe - Health and Safety improvements to structures (Phase 2)	Axe Brue IDB	133,695	60,163	0	0	73,532	0	0	0	0	0	0	109,795	8,150	850	2,900	0	12,000	0	0	
Lower Axe Urban Drainage Improvements - East Brent (Church Road)	Axe Brue IDB	100,000	75,000	0	0	25,000	0	0	0	0	15	0	0	0	0	0	100,000	0			

REFERENCE	ORGANISATION	PROJECT TOTALS(calculated from relevant columns)£ CASH											TOTAL PROJECT EXPENDITURE							
													(calculated from FCRM GiA to be expended + Total Local Contributions Secured + Funding							
Project Name	Lead Risk Management Authority - Name	Total Project Expenditure - PROJECT TOTAL	Grant in Aid - PROJECT TOTAL	Growth - PROJECT TOTAL	Local Levy - PROJECT TOTAL	Internal Drained Board Precept - PROJECT TOTAL	Public Contributions - PROJECT TOTAL	Private Contributions - PROJECT TOTAL	Other EA Contributions - PROJECT TOTAL	Further Contributions Required - PROJECT TOTAL	OM2 - PROJECT TOTAL	OM3 - PROJECT TOTAL	Pre Yr 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
													TPE - PREVIOUS YEARS £	TPE - 2015/16 £	TPE - 2016/17 £	TPE - 2017/18 £	TPE - 2018/19 £	TPE - 2019/20 £	TPE - 2020/21 £	TPE - 2021/22 onwards £
Poole Bay Beach Management Phase 4	BCP Council	15,979,000	13,582,050	0	798,650	0	1,598,300	0	0	0	0	855	0	0	0	0	0	0	0	15,979,000
Poole Bay Beach Management Phases 2 and 3	BCP Council	36,071,000	30,746,000	0	2,025,000	0	3,300,000	0	0	0	1	3,589	0	0	0	0	0	0	7,500,000	28,571,000
Poole Bridge to Hunger Hill Flood Defences	BCP Council	5,150,000	4,690,000	0	310,000	0	0	150,000	0	0	95	0	0	0	0	70,000	30,000	280,000	0	4,770,000
Poole Dolphin Haven Works	Environment Agency	2,146,000	1,021,000	0	0	0	0	1,125,000	0	0	105	0	676,000	300,000	645,000	0	525,000	0	0	0
Poole Frontage Management Plan Works - Beach Renourishment 2015 - 2016	BCP Council	1,370,000	1,340,000	0	30,000	0	0	0	0	0	0	795	1,360,000	10,000	0	0	0	0	0	0
Preston Brook Revetment Improvement	Environment Agency	277,443	240,000	0	37,443	0	0	0	0	0	73	0	0	0	0	0	37,443	0	230,000	10,000
Puddletown FAS	Environment Agency	459,400	94,400	0	360,000	0	0	5,000	0	0	19	0	0	0	0	0	0	0	0	459,400
River Avon Restoration Plan Phase 2	Environment Agency	1,435,000	1,230,000	0	0	0	0	0	0	205,000	0	0	0	0	0	0	0	0	0	1,435,000
River Frome Rehabilitation Plan	Environment Agency	947,400	651,333	0	221,067	0	0	75,000	0	0	0	0	407,400	115,000	125,000	0	0	0	0	300,000
Salisbury River Corridor Improvements	Environment Agency	9,880,000	3,120,000	0	1,098,000	0	5,662,000	0	0	0	150	0	32,000	20,000	0	21,000	57,000	750,000	4,000,000	5,000,000
Saltmoor Pumping Station Improvements	Environment Agency	144,435	84,000	0	60,435	0	0	0	0	0	50	0	0	0	61,068	83,367	0	0	0	0
Sand Bay Improvements	Environment Agency	4,100,000	1,030,000	0	2,800,000	0	120,000	150,000	0	0	300	0	0	0	0	0	0	0	0	4,100,000
Severn House Farm TDS - Revetment Improvements	Environment Agency	250,000	250,000	0	0	0	0	0	0	0	0	60	0	0	0	0	0	0	0	250,000
Shaw and Whitley Flood Relief Scheme	Wiltshire Council	335,000	0	0	290,000	0	45,000	0	0	0	30	0	0	0	0	0	20,000	140,000	175,000	0
Sherborne surface water improvements	Dorset Council	798,285	264,906	0	0	0	0	0	0	533,379	10	0	0	0	0	0	0	0	0	798,285
South Perrott Reservoir: Measures in interests of safety under Reservoirs Act	Environment Agency	282,966	282,966	0	0	0	0	0	0	0	0	0	0	0	0	1,000	20,651	81,315	180,000	0
Southlake Reservoir, Somerset: Measures in the interests of safety under the Reservoirs Act	Environment Agency	2,109,808	2,109,808	0	0	0	0	0	0	0	0	0	0	0	10,000	66,000	60,000	133,808	590,000	1,250,000
Stear Coastal Management Project	Environment Agency	20,752,777	20,752,777	0	0	0	0	0	0	0	0	0	19,802,000	823,777	0	44,000	65,000	12,000	6,000	0
Sterne Pumping Station	BCP Council	345,000	295,000	0	0	0	10,000	40,000	0	0	287	0	0	0	0	0	320,000	25,000	0	0
Stoke Gifford Dam Improvements	Environment Agency	325,000	325,000	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	0	325,000
Stolford Flood Defence Scheme	Environment Agency	1,617,390	85,531	0	1,450,228	0	81,631	0	0	0	20	0	129,531	125,500	64,874	170,691	1,067,728	59,066	0	0
Summer Lane Improvement Works	North Somerset Council	1,476,000	491,000	0	230,000	0	555,000	200,000	0	0	85	0	0	0	90,000	95,000	131,000	25,000	1,135,000	0
Swanage Beach Management Plan (BMP) & Recharge	Dorset Council	1,070,000	1,070,000	0	0	0	0	0	0	0	0	50	0	0	0	0	0	70,000	0	1,000,000
Swanage Flood Storage Reservoirs	Environment Agency	790,508	790,508	0	0	0	0	0	0	0	400	0	546,308	164,200	80,000	0	0	0	0	0
Swanage Reservoir 1 Embankment repair (2016)	Environment Agency	644,347	644,347	0	0	0	0	0	0	0	0	0	0	33,245	208,935	14,412	27,755	345,000	15,000	0
Swanage Town Centre Flood Defences	Dorset Council	950,000	400,000	0	0	0	150,000	400,000	0	0	50	0	0	0	0	0	0	250,000	0	700,000
Taunton Strategic Flood Alleviation improvements	Taunton Deane Borough Council	26,569,000	4,246,000	0	300,000	0	7,099,000	0	0	14,924,000	1,100	0	500,000	22,500	165,000	475,000	137,500	95,000	2,050,000	23,124,000
Victoria Avenue Trash Screen Improvements	Environment Agency	240,918	240,918	0	0	0	0	0	0	0	0	0	0	0	11,134	8,286	215,248	6,250	0	0
Wareham Coastal Change	Environment Agency	20,656,991	19,956,991	0	0	0	0	700,000	0	0	0	0	265,000	341,000	244,000	702,000	608,991	812,000	650,000	17,034,000
Wessex Property Flood Resilience (PFR)	Environment Agency	2,660,000	1,330,000	0	1,330,000	0	0	0	0	0	357	0	0	0	0	0	0	0	50,000	2,610,000
Wessex Property Level Protection (PLP)	Environment Agency	4,562,310	2,230,655	0	2,230,655	0	101,000	0	0	0	546	0	1,253,997	602,000	424,125	186,000	80,000	330,000	1,346,188	340,000
West Bay Coast Protection Beach Management Works	Dorset Council	1,000,000	1,000,000	0	0	0	0	0	0	0	92	62	0	0	0	0	0	0	0	1,000,000
West Bay Coast Protection Works Beach Management Plan (BMP + Works)	Dorset Council	266,100	266,100	0	0	0	0	0	0	0	260	99	154,100	56,000	56,000	0	0	0	0	0
West Bay Coastal Improvements	Environment Agency	8,936,584	4,856,584	0	1,080,000	0	3,000,000	0	0	0	144	13	0	47,000	159,000	359,000	1,240,584	7,131,000	0	0
West Moor Reservoir: Measures in interests of safety under	Environment Agency	1,011,500	1,011,500	0	0	0	0	0	0	0	0	0	0	0	0	16,500	175,000	320,000	500,000	0
West Sedgemoor Pumping Station Improvements	Environment Agency	220,000	170,000	0	0	0	50,000	0	0	0	0	0	0	0	0	0	0	0	25,000	195,000
Westmoor Favourable Condition (RWLA remedial)	Parrett IDB	190,000	190,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	190,000
Weston Bay beach recycling	North Somerset Council	100,000	75,000	0	0	0	25,000	0	0	0	1,116	0	0	0	16,200	21,000	21,000	21,000	20,800	0
Wet Moor Reservoir: Measures in interests of safety under	Environment Agency	389,250	389,250	0	0	0	0	0	0	0	0	0	0	0	0	15,000	106,000	237,000	31,250	0
Weymouth Bay Coastal Defences Phase 1 - BMP & Works	Dorset Council	162,000	77,000	0	85,000	0	0	0	0	0	80	0	0	0	0	0	85,000	15,500	15,500	46,000
Weymouth Bay Coastal Defences Phase 2 - works to Esplanade	Dorset Council	13,100,000	0	0	0	0	0	0	0	13,100,000	402	302	0	0	0	0	0	0	0	13,100,000
Weymouth Harbour Tidal Defence Scheme Phase 1a	Dorset Council	17,949,000	4,486,000	1,200,000	1,000,000	0	8,173,000	650,000	0	2,440,000	133	0	0	0	0	0	0	2,600,000	293,000	15,056,000
Weymouth Harbour Tidal Defence Scheme Phase 2 - tidal barrier	Dorset Council	44,900,000	0	0	0	0	0	0	0	44,900,000	800	0	0	0	0	0	0	0	0	44,900,000
Willway Street Outfall	Bristol City Council	138,518	40,518	0	40,000	0	40,000	18,000	0	0	6	0	0	0	0	138,518	0	0	0	0
Wilton Wylfe Flood Bank	Environment Agency	656,000	339,469	0	316,531	0	0	0	0	0	42	0	0	2,971	40,969	32,810	8,715	500	1,000	569,035
Wimborne FDS Improvements	Environment Agency	555,324	30,467	0	524,857	0	0	0	0	0	45	0	0	2,426	64,867	49,426	390,297	18,183	28,125	2,000
WLMP HMWB (WFD) Mitigation Measures - Wessex	Environment Agency	612,194	512,194	0	0	0	0	0	100,000	0	0	0	52,410	7,028	34,222	14,612	4,000	0	0	499,922
Wrington Flood Relief Scheme	North Somerset Council	1,793,487	308,000	0	380,000	0	873,487	232,000	0	0	79	0	288,363	161,710	53,370	146,557	810,000	333,487	0	0
Yate Chipping Sodbury Defence Improvements	Environment Agency	5,300,000	556,216	0	530,464	0	0	0	0	4,213,320	132	0	0	3,722	71,217	49,386	4,119	2,020	0	5,169,536

**ITEM 9 – Finance: 2019/20 Finance Update**  
**Paper for: Decision**

**Appendix 1 & 2:** FCRM RFCC January 2020 Dashboard

**Appendix 3:** 2019/20 Local Levy Programme

**Appendix 4:** Future Years Levy Programme

**Appendix 5:** Bath Flood Defence Scheme - Twerton Gate Replacement Levy Fact Sheet

**Appendix 6:** Summer Lane Improvement Works Levy Fact Sheet

**Paper by: Andrew Gill**

**Subject: Finance: 2019/20 Finance Update**

**Recommendations**

The Wessex Regional Flood and Coastal Committee are asked to:

- **Note** the budget and forecast position of 2019/20 FDGiA Capital, Revenue and Local Levy Programmes and associated Outcome Measures.
- **Approve** the 2019/20 updated Levy Programme in Appendix 3. This Levy Programme incorporates projects approved through the year, and any forecast changes.
- **Approve** the new Levy bids for
  - **Bath Flood Defence Scheme - Twerton Gate Replacement**
  - **Summer Lane Improvement Works**

**Headline messages:**

**Based on November financial data:-**

- 2019/20 EA FDGiA Capital is forecasting a small underspend of £60k with an end of year outturn of £11,181k.
- 2019/20 EA FDGiA Revenue expenditure is forecasting a £266k overspend with an end of year outturn of £13,290k.
- 2019/20 FDGiA Capital Local Authority expenditure is on track with an end of year outturn of £1,672k.
- 2019/20 Local levy expenditure is forecasting an end of year outturn of £4,441k against the April Committee target with an end of year outturn of £7,351k.
- 2019/20 Programme is forecasting to better protect 570 homes in 2019/20.

**ITEM 9 – Finance: 2019/20 Finance Update**  
**Paper for: Decision**

**1.0 Introduction**

- 1.1 This paper updates the Wessex Regional Flood and Coastal Committee on the 2019/20 budget and forecast position for FDGiA Capital, FDGiA Revenue, Local Levy budgets, and Outcome Measures (OM's). The paper also includes bids for additional Levy funding for Committee consideration.
- 1.2 Given the timings of writing this paper the 2019/20 figures quoted are based on November 2019 forecasts.

**2.0 2019/20 FDGiA EA Capital budget**

- 2.1 The Wessex Environment Agency (EA) Capital programme is currently forecasting a small underspend of £60k with an end of year spend of £11,181k against a budget of £11,241k. There is £238k of pressure on the programme for urgent repairs to the Palmers Brewery wall in Bridport. This increase will come into forecast in January. We have made the National Programme team aware of the potential increase above our budget.

**3.0 2018/19 Local Authority and Internal Drainage Board (LA/IDB) Capital Budget**

- 3.1 The RMA and IDB capital programme is currently on track forecasting an end of year spend of £1,672k against a budget of £1,671k.

**4.0 Outcome Measures (OM2 and 3)**

- 4.1 OM2s are the number of households better protected from river and sea flooding.
- 4.2 OM3s are the number of households with a reduced risk of coastal erosion.
- 4.3 The full break down of OM2 and 3 delivery is detailed in Appendix 1 and 2. The current combined OM2 and OM3 forecast is 570. The target for 2019/20 is 992. The majority of the 442 reduction in 2019/20 is due to projects now delivering in 2020/21.

**5.0 Outcome Measure 4**

- 5.1 OM4's relate to environmental improvements. In 2019/20 we are forecasting the enhancement of habitat through the following projects: Blind Yeo (20km); Flights Hole Weir (10km) – works now complete; French Weir (13km) – works including eel pass now complete; Stolford (5km) – works including eel pass now complete; and the NFM Piddle Headwater project (3km).
- 5.2 A question was asked at the October Committee meeting about monitoring the success of environmental enhancement works such as Eel passes once they have been installed. In the future this monitoring activity will be picked up with "PlaceMarker"
- 5.3 PlaceMarker is an Environment Agency developed field based survey method undertaken in relation to a river project. It has been developed to:
- (a) Provide a broad baseline of a **river project site** and the **study area** in which it sits.
  - (b) Identify potential enhancements and inform the scope of capital projects.
  - (c) Repeatable (i) immediately pre-project; (ii) immediately post-project; and (iii) post recovery from project works.

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(d) Provide evidence of mid to long term improvements to our rivers as a result of the implementation of capital schemes. PlaceMarker contains the Biodiversity Net Gain River Metric and can be used to predict, measure and monitor biodiversity net gain.

5.4 **Progress to date.** PlaceMarker is still a new initiative, however nationally 77 River Surveys and 55 Study Area Surveys have been undertaken by Environment Agency (NEAS) surveyors for both pre and post project assessments. The surveys have been used to help further develop the tool, aid decision-making and monitor a range of river projects with environmental enhancement opportunities.

5.5 To date surveys in Wessex have been undertaken at two sites and these have helped identify opportunities for environmental enhancements. Further surveys will be completed post project completion, and this information will be shared with the Committee at future meetings.

#### **6.0 The Wessex EA Revenue programme**

6.1 This includes asset maintenance, revenue projects, and staff costs. We are currently forecasting an overspend of £266k against a budget of £13,024k. This potential overspend has been managed back from the £724k reported to Committee at the October meeting. We are continuing to look for opportunities to manage this figure back further.

#### **7.0 2019/20 Local Levy Programme**

7.1 The summary of the 2019/20 position can be found in the dashboard in Appendix 1, and the 2019/20 Local Levy Programme in Appendix 3.

7.2 The Local Levy financial forecast for 2019/20 year end is £4,441k on projects across Wessex against a Committee April baseline target of £7,351k. This is a £2,910k reduction in forecast compared to the April baseline. The majority of this reduction in forecast are due to changes in two projects:-

- An opportunity has arisen to pay back the £1,200k West Bay Coastal Improvements project Levy loan in 2019/20 instead of post 2020/21. This has resulted in the Levy forecast reducing by £1,200k and the budget going into Levy balances to be available for other projects.
- Wessex PLP forecast has reduced by £548k. This is due to delays in setting up the new contractor framework. The Levy funding and corresponding OM's have been re-profiled into later years as part of the Capital Refresh process.
- Brislington FDS Improvements has reduced by £439k. This is due to the construction start of the project has been delayed by 2 months which will reduce the amount of Levy spent in 2019/20. The total cost of the project has not changed so this Levy will still be required, but now in 2020/21.

7.3 A question was asked at the October Committee about how the Local Levy balances are invested. Our national finance team have confirmed that the Levy balances are not invested but held in an Environment Agency bank account which earns interest. This interest is then added back into the Levy balances. For the period April to August 2019 in the order of £15k interest was earned from the Wessex Levy balances.

#### **8.0 New Bids for Levy Funding**

8.1 **Bath Flood Defence Scheme - Twerton Gate Replacement.** This is an existing major EA project to refurbish/replace two large water level control structures on the River Avon at Twerton,

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Bath. At the October meeting the Committee agreed in principle to fund an indicative £1,200k of Levy funding (in addition to the £120k that had previously been approved), subject to a formal request for the funding at a later meeting when better information was available.

- 8.2 The project team have been progressing with the project since the October meeting, and now have improved estimates of the total project costs subject to a full tender exercise in January. Based on the current cost estimates the Committee are asked to consider a formal bid for £1,500k of Levy funding bringing the total Levy contribution to £1,620k, including the £120k that has already been approved. Work is also ongoing to secure additional partnership funding for the project. The project will better protect 773 homes, some of which are in a deprived community. Further information is available in the Levy Fact Sheet in Appendix 5.
- 8.2 **Summer Lane Improvement Works.** This is an existing North Somerset Council project which is already on the Levy Programme for works to raise existing bunds, construct a flood storage area and the installation of culvert crossings. The total costs of construction are greater than originally estimated so a design revision has been made to reduce the costs, whilst ensuring the scheme delivers its original outcomes. There is however still a funding shortfall of £50k. Partnership funding has been secured from FDGiA (£491k), Highways Authority (£400k), Parks and Open Spaces (£20k), Wessex Water (£200k), and the LLFA (£135k). In addition, the project currently has an allocation of £180k from Local Levy. The Committee are requested to consider a bid for an additional £50k Local Levy contribution to this project to allow it to proceed. The project will better protect 93 homes from flooding. Further details are available in the Levy Fact Sheet in Appendix 6.
- 8.3 Both the Bath Flood Defence Scheme - Twerton Gate Replacement and Summer Lane Improvement Works projects are requesting funding in 2020/21. The effects of the bids on Levy Balances are shown in the Future Years' Levy Programme in Appendix 4, and will be shown in more detail in the presentation during the meeting.

## **9.0 Recommendations**

The Wessex Regional Flood and Coastal Committee are asked to:

- **Note** the budget and forecast position of 2019/20 FDGiA Capital, Revenue and Local Levy Programmes and associated Outcome Measures.
- **Approve** the 2019/20 updated Levy Programme in Appendix 3. This Levy Programme incorporates projects approved through the year, and any forecast changes.
- **Approve** the new Levy bids for
  - **Bath Flood Defence Scheme - Twerton Gate Replacement**
  - **Summerlane Improvement Works**

**Andrew Gill**  
**FCRM Senior Team Leader – Wessex Programming**  
**December 2019**

Appendix 1 - FCRM WESSEX RFCC Dashboard - January 2020 (November PPMT Data)

PAGE 1 - OUTCOME MEASURES - PERFORMANCE SUMMARY

	19/20 Baseline Target	Forecast	Variance	Comments
<b>OM2: River &amp; Sea Flooding</b> Number of households moved out of any flood probability category to a lower probability category	952	516	-436	The majority of the Wessex OM's have been delivered already within the 6 year Capital Investment Period and the forecast for the 6 year programme remains at 16,177 to be delivered by the end of 2020/21. The majority of the OM2 reduction in 2019/20 occurred as part of the July Capital Refresh with the Wessex PLP project moving 96, Summer Lane 93, and Cerne 220, into 2020/21. The other significant change is 64 OM2 and 26 OM3 for Weymouth BMP & Works being removed from forecast
<b>OM3: Coastal Erosion</b> Households with reduced risk of coastal erosion	40	54	14	
<b>KM of Water Body Enhanced through FCRM</b>	-	51	-	These figures include outputs from NFM projects Individual projects delivering this year include :- <b>Km Water Body Enhanced</b> Blind Yeo 20km, French Weir Remedials 13km, Flights Hole Weir 10km, Stolford 5km - all of these OM4s (total 48) have now been claimed. The NFM Piddle Headwater 3km is still forecast to be claimed this year. <b>Ha of Habitats Enhanced</b> :- 2ha NFM Piddle Headwaters. <b>Ha of Habitat Created</b> 1ha NFM Wiliton and Monksilver, 2ha NFM Piddle Headwaters.
<b>Ha of Habitat enhanced through FCRM</b>	-	2	-	
<b>Ha of Habitat Created through FCRM</b>	-	3	-	

Note: All OM targets reflect our Affordable Budget allocation. Our forecast may be based on an overprogramme.



PAGE 2 - FINANCES - PERFORMANCE SUMMARY				
	19/20 Target (revised Oct '19)	Forecast (£k)	Variance (£k)	Comments
EA FDGIA Capital - Including Capital Salaries	11,241	11,181	-60	Previous target was £11,026k. There is £238k of pressure from the the failure of the Palmers Brewery wall in Bridport which is due to come into forecast in January. We have made the National Programming Team aware of this potential increase in forecast.
LA/IDB Capital	1,671	1,672	1	Previous target was £1,095k. Forecasting to spend to target
EA FCRM Revenue excluding SRA	13,024	13,290	266	Previous target was £12,986k. FCRM Revenue GiA reduced from £576k to £266k overspend of which: <ul style="list-style-type: none"> <li>Incident Management team account for £0.2m</li> <li>Maintenance programme overspend &lt;£0.1m. Programme overspend has dropped to under £0.1m as maintenance are gliding their programme towards budget.</li> </ul>
Local Levy Local levy spend on EA and RMA projects	7,351	4,441	-2,910	There has been a significant reduction in Levy forecasts. This is mainly due to 2 projects. An opportunity has arisen to pay back the West Bay Coastal Defences project Levy loan of £1.2m using FDGiA this year. This has resulted in a significant drop in Levy forecasts, with this money effectively going back into balances for other projects to use. The other projects to have a large reduction in forecast are Wessex PLP project (£548k) and Brislington FDS Improvements (£439k). Wessex PLP has reduced spend this year due to delays in establishing a new contractor framework for this work. The Levy funding for this project has moved back in the programme into later years, and is still planned to be delivered. The reduction in forecast for Brislington this year is due to the construction start being delayed by 2 months which will reduce the amount of local levy spent in 2019/20 but increase the need in 2020/21. The overall cost of the project is unchanged.
Capital Efficiencies	1,200	1,200	0	Currently on target.
Revenue Efficiencies	927	927	0	Currently on target.
SCC / SRA Contracted Works	1,479	2,151	672	Rechargeable works - Reported for information only.



## Appendix 2 - Outcome Measure Summary

The total number of households moved to a lower flood risk category and the total number of households with reduced risk of coastal erosion



### PERFORMANCE EXPLANATION

Wessex Area is forecasting to outturn under the combined Outcome Measure (OM) 2 and 3 targets for 2019/20 (OM 570 forecast against 992 target). This is due to projects moving OM delivery into 2020/21. Over the last two years of the programme we are still expecting to delivery the same number of OM's.

OM forecast against start of year target is detailed in the table below.

OM2 - Households moved to a lower risk flood category

OM3 - Households with reduced risk of coastal erosion

### KEY:

Green Cells are increase in forecast  
White cells are no change to forecast  
Yellow Cells are decrease to forecast

## SUPPLEMENTARY INFORMATION

### OM2 - Details of schemes forecasting to contribute this year

Scheme Name	Location	Risk Management Authority	OM2 Forecast	OM2 19/20 Target	Variance	OM claimed to date
Weymouth Harbour Tidal Defence Scheme Phase 1a	Weymouth, Dorset	LA	52	0	52	0
Palmers Brewery Wall-Works	Bridport, Dorset	EA	35	0	35	0
Weymouth Bay Coastal Defences Phase 1 - BMP & Works	Weymouth, Dorset	LA	16	0	16	0
Weston Bay beach recycling - CPW 3186	Weston-super-Mare, Somerset	LA	223	223	0	0
West Bay Coastal Improvements	West Bay, Dorset	EA	144	144	0	144
Wrington Flood Relief Scheme LA - LL 153	Wrington, North Somerset	LA	26	26	0	0
Lyme Regis Coast Protection Works BMP 2017/18 onwards	Lyme Regis, Dorset	LA	1	1	0	0
Brislington FDS Improvements	Bristol	EA	0	0	0	0
Bradpole surface water and groundwater improvements	Bridport, Dorset	LA	0	0	0	0
Orcheston Surface Water Attenuation	Orcheston, Wiltshire	LA	0	0	0	0
West Sedgemoor Pumping Station Improvements	West Sedgemoor pumping station, Somerset	EA	0	0	0	0
Summer Lane	Bristol	LA	0	93	-93	0
Wessex PLP	Various sites in Wessex	EA	19	115	-96	0
Hamworthy and Upton FDS	Poole, Dorset	LA	0	130	-130	0
Cerne Spillway and Gabion Replacement	Cerne Abbas, Dorset	EA	0	220	-220	0
<b>TOTAL</b>			<b>516</b>	<b>952</b>	<b>-436</b>	<b>144</b>

### OM3 - Details of schemes forecasting to contribute this year

Scheme Name	Location	Risk Management Authority	OM3 Forecast	OM3 Target	Variance	OM claimed to date
West Bay Coastal Improvements	West Bay, Dorset	LA	27	13	14	27
Lyme Regis Coast Protection Works Beach Management Plan (BMP & Works) 2017/18 onwards	Lyme Regis, Dorset	LA	27	27	0	0
Weymouth Bay Coastal Defences Phase 1 - BMP & Works	Weymouth, Dorset	LA	0	0	0	0
<b>TOTAL</b>			<b>54</b>	<b>40</b>	<b>14</b>	<b>27</b>

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### Appendix 3 WRFCC 2019/20 Local Levy Programme

**Table 1 - Capital Local Levy Projects**

Local Council Area	Project Name	Lead RMA	April 2019/20 baseline (£k)	October 2019/20 meeting approved forecast (£k)	Variance October to January Committee meetings	January 2019/20 meeting approved forecast (£k)	Comments
Bath and North East Somerset Council	At Risk Culvert Surveys	BANES	0	40	0	40	Project was approved in July Committee meeting, funding split between 19/20 and 20/21
Bournemouth, Christchurch and Poole	Delivery of Southern Coastal Group Key Priorities	BCP	30	23	0	23	Match funding to support the work of the Southern Coastal Group. Approved at the April 2019 Committee meeting.
Bournemouth, Christchurch and Poole	Dorset Coastal Asset Management System	BCP	0	99	0	99	The project proposed is to develop a new Dorset Coastal Asset Management System that will enable us to deliver a good asset management system for the communities along the Dorset coast.
Bournemouth, Christchurch and Poole	Poole Bridge to Hunger Hill Defences	BCP	280	280	0	280	Funding for production of Outline Business Case for the Central Poole - Poole Bridge to Hunger Hill project.
Bristol City Council	Avonmouth and Severnside Enterprise Area (LA)	BCC	500	500	0	500	Joint EA/RMA project which will reduce flood risk, and provide economic growth to an area of Avonmouth. This project does not have any FDGiA funding for the next couple of years. The Committee agreed to continue funding of the development of this project with specified amounts of Levy until the FDGiA is available again post 2021.
Bristol City Council	Brislington FDS Improvements	EA	688	361	-112	249	Proposed repair and raising of flood defences to achieve 1:50 SoP, includes construction of a new trash screen. Reduction in forecast this year is due to the construction start being delayed by 2 months which will reduce the amount of local levy spent in 2019/20 but increase the need in 2020/21. The overall cost of the project is unchanged.
Bristol City Council	Bristol Avon Strategy (was Strategic Avon Defence)	BCC	250	0	0	0	RMA project looking at reducing flood risk in Bristol City. This project does not have any FDGiA funding for the next couple of years. The Committee agreed to continue funding of the development of this project with specified amounts of Levy until the FDGiA is available again post 2021. Was formally known as Strategic Avon Defence.
Bristol City Council	Longmoor Tunnel Refurbishment	EA	0	62	-4	58	Forecast is for additional costs from end of project in 18/19.
Dorset Council	Beach Management Investigations Blandford	EA	10	10	2	12	New Beach Management Plan Investigations which will inform future beach management plans.
Dorset Council	Bradpole Surface Water and Groundwater Improvements	DC	50	50	0	50	RMA project looking at reducing surface water flood risk to the Bradpole area of Bridport.
Dorset Council	Bridport FDS Improvements	EA	100	0	0	0	EA project to be closed. To be continued under a new DCC led scheme.
Dorset Council	Charmouth Stepped Access Ramp	DC	10	15	-5	10	Access to the beaches at Charmouth is generally poor and potentially unsafe. The overall aim of the project is within the existing defences to construct a stepped, ramped access from the esplanade level down onto the beach in front of the Heritage Centre. The Levy funding will allow the project to go through its development phase, including survey and design.
Dorset Council	Chesil Cove Curved Seawall Study	DC	0	62	2	64	5 yr monitoring programme to assess the condition of Sea Wall. A bid has gone to the October 19 Committee meeting for an increase to cover ground investigation works.
Dorset Council	Dorchester FDS	EA	100	67	0	67	Main scheme is no longer viable. Small scale interventions being funded through local levy. Investigations into fish passage improvements also underway.
Dorset Council	Dorset Coast Forum Collaboration	EA	12	12	0	12	Collaborative agreement relating to engagement of public and marine sector interests in flood and coastal risk management decision making.
Dorset Council	Dorset County Council Progressing Deliverable Projects to obtain Capital Funding	DC	25	26	16	42	Dorset County Council project to develop projects to the capital bidding stage.
Dorset Council	Preston Brook Revetment Improvement	EA	0	0	0	0	The Preston Brook project was delayed in 2018/19 due to technical and financial considerations. The project is now bidding for FDGiA funding in 2020/21.
Dorset Council	Swanage Seawall Coastal Study	DC	10	0	10	10	Study looking at the stability of the existing sea wall and if it requires upgrading. Study still underway.
Dorset Council	West Bay Coastal Improvements	EA	2280	861	47	908	Local levy loan to cover FDGiA has been removed from forecast due to in year FDGiA availability.
Dorset Council	Weymouth Tidal Defence Scheme Phase 1a	DC	95	95	-95	0	All survey work for this project is now complete so local levy forecast is no longer required.
Dorset Council	Wimborne FDS Improvements	EA	0	35	0	35	This project was substantially complete last financial year. The budget this year is for final completion costs.
North Somerset Council	Summer Lane Improvements	NSC	45	0	0	0	Improvement works at the Summer Lane location in Weston-Super-Mare.
Somerset County Council	Cannington FDS	EA	5	5	0	5	These are the final costs associated with the completed Cannington scheme.
Somerset County Council	Dunball Sluice Gates Refurbishment	EA	262	93	16	109	Appraisal work for Dunball sluice gates refurbishment.
Somerset County Council	Parrett Estuary Cannington Bends	EA	0	314	-157	157	Completion of the Tucketts Clyst element of the project which was delayed from 2018/19. The reduction in local levy is due to a revised funding split in the project to maximise eligible FDGiA.
Somerset County Council	Stolford FDS	EA	0	12	-2	10	Eel passage improvements underway.
Somerset County Council	Taunton Strategic Flood Mitigation Project	SCC	30	167	-8	159	Work to examine the options for a number of flood risk management options for managing flood risk in Taunton in more detail. Local Levy used for EA PCM project management staff cost.
South Gloucestershire Council	Yate Chipping Sodbury Defence Improvements	EA	0	2	0	2	Scheme delayed to pipeline
Wiltshire Council	Bradford-on-Avon FDS	EA	125	114	-102	12	Project development for the Bradford on Avon scheme. Due to funding gap for main scheme we are currently using targetted spending to look at the scheme viability.
Wiltshire Council	Corsham Flood Relief Scheme - EA Led	EA	0	30	0	30	The proposal is to upgrade the culverted section of the Corsham culvert in partnership between Environment Agency, Wiltshire Council and Wessex Water. This is a pipeline scheme. However the development costs will be funded through the rest of the levy budget as EA led and will happen this year.
Wiltshire Council	Corsham Flood Relief Scheme - LA Led	W	245	10	0	10	This scheme started off as LA led, this forecast is for the scheme development costs incurred by Wilts prior to handover to EA.
Wiltshire Council	Salisbury FDS Improvements	EA	229	586	-110	476	Appraisal work for the Salisbury FAS scheme.
Wiltshire Council	Shaw and Whitley Flood Relief Scheme	W	265	125	-80	45	Wiltshire Council project looking at options to reduce flooding to Shaw and Whitley from the South Brook. The Levy funding in 2019/20 is to gain a better understanding of flood risk, and for options to be developed. Scheme now forecast to deliver in 20/21
Wiltshire Council	Wilton Wyllye Flood Bank	EA	5	2	0	2	This project has been paused whilst guidance is sought as to the most appropriate way forward for this project – There was no support from the Town Council with the proposed scheme, hence the reduction in Local Levy.

Table 1 - Capital Local Levy Projects

Local Council Area	Project Name	Lead RMA	April 2019/20 baseline (£k)	October 2019/20 meeting approved forecast (£k)	Variance October to January Committee meetings	January 2019/20 meeting approved forecast (£k)	Comments
Various	Groundwater Flood Forecasting Modelling	EA	7	7	0	7	We are proposing to expand the groundwater forecasts to another 15 indicator borehole sites. This work will be delivered over a three year period employing a consultant with the relevant expertise.
Various	Natural Flood Management - Wessex pilot	EA	225	39	6	45	Capital work to investigate potential areas and implement measures for Natural Flood Management. Reduction in forecast reflecting the cost for the NFM officer. The rest of the NFM work is forecast under the Revenue NFM line in this programme.
Various	Network Optimisation - Telemetry	EA	50	32	-7	25	Programme of Network Optimisation works across Wessex, slight reduction in costs.
Various	Support to deliver Levy Cap Projects	EA	2	2	0	2	Post flood event data collection and problem identification studies.
Various	Wessex PLP	EA	822	330	-56	274	PLP measures are used to reduce the flood risk to properties and include the provision of measures such as flood doors, flood gates, air brick covers, drain shut-off valves and sump-pumps. Some reprofiling of funds whilst the framework is renewed. Reduction in forecast this financial year due to delays in the PFR framework being available.
	Total Capital		6,757	4,468	- 639	3,829	

Table 2 - Levy funded Revenue activities

Local Council Area	Project Name	Lead RMA	April 2019/20 baseline (£k)	October 2019/20 meeting update (£k)	Variance October to January Committee meetings	January 2019/20 meeting update (£k)	Comments
Dorset Council	EA contribution to SWIM	EA	20	20	0	20	Contribution to the running costs of SWIM. The SWIM project will improve data communication between the Lead Local Flood Authorities and the EA. It contributes to the extension of this useful tool beyond the Dorset County boundary permitting other LLFAs and emergency responders to share critical flood data during incidents. The contribution has already been made this year.
Dorset Council	SCOPAC	EA	2	2	0	2	Specific elements of research. e.g. adaptation to climate change along the South Coast. CIRA beach management manual update, regional wave climate review and its implications for shoreline management. The ask for research is no longer needed so the LL only needs to cover fees.
Dorset Council	Jurassic Coast World Heritage Team Contribution	EA	15	17	0	17	Contribution to costs of the Jurassic Coast team to benefit the World Heritage site.
Various	Flood Resilience Engagement	EA	81	76	0	76	These posts are helping ensure that communities are engaged in understanding their Fluvial and Groundwater flood risk. Working with the EA and other Risk Management Authorities in managing this risk into the future. Slight change in forecast due to timing of recruitment.
Various	FW Local Public Awareness	EA	6	4	2	6	Community engagement across Wessex
Various	Groundwater warning service officer	EA	35	35	0	35	Following the successful pilot of a full groundwater flood warning service in the South Winterbourne Area during 2013/14, this project is developing a further 22 groundwater warning areas in Dorset, Hampshire and Wiltshire to cover many of the remaining 35,000 properties. This is an officer post for the next 5 years.
Various	Natural Flood Management Wessex - contributions to partners	EA	0	162	-25	137	Revenue work for contributions to partners to investigate potential areas and implement measures for Natural Flood Management.
Various	Project Pipeline Development	EA	65	60	-60	0	Project manager to develop pipeline of projects to build future Capital Investment Plan submissions. This post will now not be filled this year.
Various	Staff Costs Area LL - Wx	EA	370	288	21	309	Ongoing technical support for Flood Risk Management delivery.
Various	Wessex Catchment Training	EA	0	10	0	10	Approved in July committee meeting. Project will support incident management training. Was called Wessex Incident Management Training and Exercising Framework
	Total Revenue		594	674	-62	612	

Table 3 - Total Committed Local Levy (Capital + Revenue)

Total Committed (Capital + Revenue) spend in year (£k)	7,351	5,142	-	701	4,441
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Table 4 - Local Levy Balances

	April 2019/20 Baseline Programme (£k)		
Opening balance	6,532	6,532	6,532
Local Levy Income	3,672	3,672	3,672
Interest	5	5	5
Total income	10,209	10,209	10,209
Closing Levy Balance	2,858	5,067	5,768

Key:
New Project
BCP = Bournemouth, Christchurch and Poole Council
BANES= Bath and North East Somerset Council
DC= Dorset Council
BCC= Bristol City Council
SGC=South Gloucestershire Council
SCC= Somerset County Council
NSC= North Somerset Council
W= Wiltshire Council
V= Various

## Appendix 4 Future Years Local Levy Programme - Capital

Local Council Area	Project Name	Lead RMA	2020-21 (£k)	2021-22 (£k)	2022-23 (£k)	2023-24 (£k)	2024-25 (£k)	2025-26 (£k)	2026-27 (£k)	2027-28 Onwards (£k)
Bath and North East Somerset Council	At Risk Culvert Assessments – Pilot Study	BANES	40	0	0	0	0	0	0	0
Bath and North East Somerset Council	Bath Flood Defence Scheme Twerton Gate Replacement	EA	1620	0	0	0	0	0	0	0
Bath and North East Somerset Council	Pulteney Radial Gate	BANES	500	0	0	0	0	0	0	0
Bournemouth, Christchurch and Poole	Avon Beach and Friars Cliff Groyne Replacement Scheme	BCP	0	0	0	0	40	0	0	0
Bournemouth, Christchurch and Poole	Dorset Coastal Asset Management System	BCP	76	52	0	0	0	0	0	0
Bournemouth, Christchurch and Poole	Poole Bay Beach Management Phase 4	BCP	0	0	0	0	0	0	0	799
Bournemouth, Christchurch and Poole	Poole Bay Beach Management Phases 2 and 3	BCP	421	324	330	194	100	552	104	0
Bristol City Council	Avonmouth Severnside Enterprise Area (ASEA) Ecology Mitigation and Flood Defence Project	BCC	1500	1000	1000	0	0	0	0	0
Bristol City Council	Brislington Flood Defence Scheme Improvements	BCC	559	0	0	0	0	0	0	0
Bristol City Council	Bristol Avon Strategy	BCC	250	500	0	0	0	500	500	0
Bristol City Council	Longmoor Tunnel Refurbishment	BCC	70	5	0	0	0	0	0	0
Dorset Council	Dorchester FDS Improvements	EA	0	0	0	20	0	0	0	0
Dorset Council	Beach Management Investigations Blandford	EA	10	10	0	0	0	0	0	0
Dorset Council	Bradpole surface water and groundwater improvements	DC	70	0	0	0	0	0	0	0
Dorset Council	Chesil Cove Curved Seawall Study	DC	17	0	0	0	0	0	0	0
Dorset Council	Dorset Coast Forum Collaboration	EA	12	12	12	12	0	0	0	0
Dorset Council	Puddletown FAS	EA	0	0	0	6	100	255	0	0
Dorset Council	Ringstead BMP Monitoring Study	DC	25	0	0	0	0	0	0	0
Dorset Council	Weymouth Harbour Tidal Defence Scheme Phase 1a	DC	0	0	0	0	0	0	1000	0
Dorset Council	Wimborne FDS Improvements	EA	28	2	0	0	0	0	0	0
North Somerset Council	Sand Bay Improvements	EA	0	0	0	0	0	1400	1400	0
North Somerset Council	Summer Lane Improvement Works	NSC	95	0	0	0	0	0	0	0
Somerset County Council	Bridgwater Tidal Barrier Flood Defence Scheme	SCC	0	1000	500	1500	1000	0	0	0
Somerset County Council	Dunball Sluice Gates Refurbishment	EA	0	58	235	0	0	0	0	0
Somerset County Council	Taunton Strategic Flood Alleviation Improvements	SCC	50	0	0	0	0	0	0	0
South Gloucestershire Council	Yate Chipping Sodbury Defence Improvements	EA	0	0	0	150	150	100	0	0
Wiltshire Council	Bradford -on-Avon Flood Alleviation Scheme	EA	156	71	0	0	0	0	0	0
Wiltshire Council	Chitterne Attenuation of surface water	W	0	45	0	0	0	0	0	0
Wiltshire Council	Corsham flood alleviation (EA Led)	EA	0	0	210	0	0	0	0	0
Wiltshire Council	Salisbury River Corridor Improvements	EA	338	0	0	0	0	0	0	0
Wiltshire Council	Shaw and Whitley Flood Relief Scheme	W	145	0	0	0	0	0	0	0
Wiltshire Council	Wilton Wylfe Flood Bank	EA	1	1	1	228	0	0	0	0
Various	Contribution to Wessex RFCC Priority Places	EA&LA	0	0	1000	1000	2000	1000	1000	3000
Various	Groundwater Flood Forecasting Modelling	EA	7	0	0	0	0	0	0	0
Various	Natural Flood Management - Wessex	EA	47	47	47	0	0	0	0	0
Various	Network Optimisation - Telemetry	EA	10	10	0	0	0	0	0	0
Various	Wessex Property Flood Resilience (PFR)	EA	50	455	85	480	175	100	15	0
Various	Wessex Property Level Protection (PLP)	EA	919	180	40	10	0	0	0	0
			7,017	3,772	3,460	3,599	3,565	3,907	4,019	3,799

**Table 2 - Local Levy funded Revenue activities**

Local Council Area	Project Name	Lead RMA	2020-21 (£k)	2021-22 (£k)	2022-23 (£k)	2023-24 (£k)	2024-25 (£k)	2025-26 (£k)	2026-27 (£k)	2027-28 Onwards (£k)
Dorset Council	EA contribution to SWIM	EA	20	0	0	0	0	0	0	0
Dorset Council	Jurassic Coast World Heritage Team Contribution	EA	15	0	0	0	0	0	0	0
Dorset Council	SCOPAC	EA	2	0	0	0	0	0	0	0
Various	Flood Resilience Engagement	EA	34	0	0	0	0	0	0	0
Various	FW Local Public Awareness	EA	6	0	0	0	0	0	0	0
Various	Groundwater warning service officer	EA	35	0	0	0	0	0	0	0
Various	Natural Flood Management Wessex - contributions to partners	EA	65	115	125	0	0	0	0	0
Various	Project Pipeline Development	EA	65	0	0	0	0	0	0	0
Various	Staff Costs Area LL - Wx	EA	370	370	370	370	370	370	370	370
			<b>612</b>	<b>485</b>	<b>495</b>	<b>370</b>	<b>370</b>	<b>370</b>	<b>370</b>	<b>370</b>

**Table 3 - Total Committed Local Levy (Capital + Revenue)**

2018/19 (£k) Feb 19	2019/20 (£k)	2020-21 (£k)	2021-22 (£k)	2022-23 (£k)	2023-24 (£k)	2024-25 (£k)	2025-26 (£k)	2026-27 (£k)	2027-28 Onwards (£k)
<b>3,953</b>	<b>4,441</b>	<b>7,628</b>	<b>4,257</b>	<b>3,955</b>	<b>3,969</b>	<b>3,935</b>	<b>4,277</b>	<b>4,389</b>	<b>4,169</b>

**Table 4 - Local Levy Balances**

	2018/19 (£k) Feb 19	2019/20 (£k)	2020-21 (£k)	2021-22 (£k)	2022-23 (£k)	2023-24 (£k)	2024-25 (£k)	2025-26 (£k)	2026-27 (£k)	2027-28 Onwards (£k)
<b>Opening balance</b>	<b>6,745</b>	<b>6,532</b>	<b>5,768</b>	<b>1,927</b>	<b>1,495</b>	<b>1,442</b>	<b>1,451</b>	<b>1,575</b>	<b>1,439</b>	<b>1,272</b>
<b>Local Levy Income</b>	<b>3,600</b>	<b>3,672</b>	<b>3,782</b>	<b>3,820</b>	<b>3,896</b>	<b>3,974</b>	<b>4,054</b>	<b>4,135</b>	<b>4,218</b>	<b>4,302</b>
<b>Interest</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>
<b>Total income</b>	<b>10,350</b>	<b>10,209</b>	<b>9,555</b>	<b>5,752</b>	<b>5,397</b>	<b>5,421</b>	<b>5,510</b>	<b>5,715</b>	<b>5,661</b>	<b>5,579</b>
<b>Closing Levy Balance</b>	<b>6,397</b>	<b>5,768</b>	<b>1,927</b>	<b>1,495</b>	<b>1,442</b>	<b>1,451</b>	<b>1,575</b>	<b>1,439</b>	<b>1,272</b>	<b>1,411</b>

<b>Key:</b>
New Project
Indicative Funding
BCP = Bournemouth, Christchurch and Poole Council
BANES= Bath and North East Somerset Council
DC= Dorset Council
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SCC= Somerset County Council
NSC= North Somerset Council
W= Wiltshire Council
V= Various





Environment  
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# fact sheet

## Appendix 5: Bath Flood Defence Scheme – Twerton Gate Replacement

Local Authority: Bath and North East Somerset

### Photographs of Twerton Gate

Photo 1



Photo 2



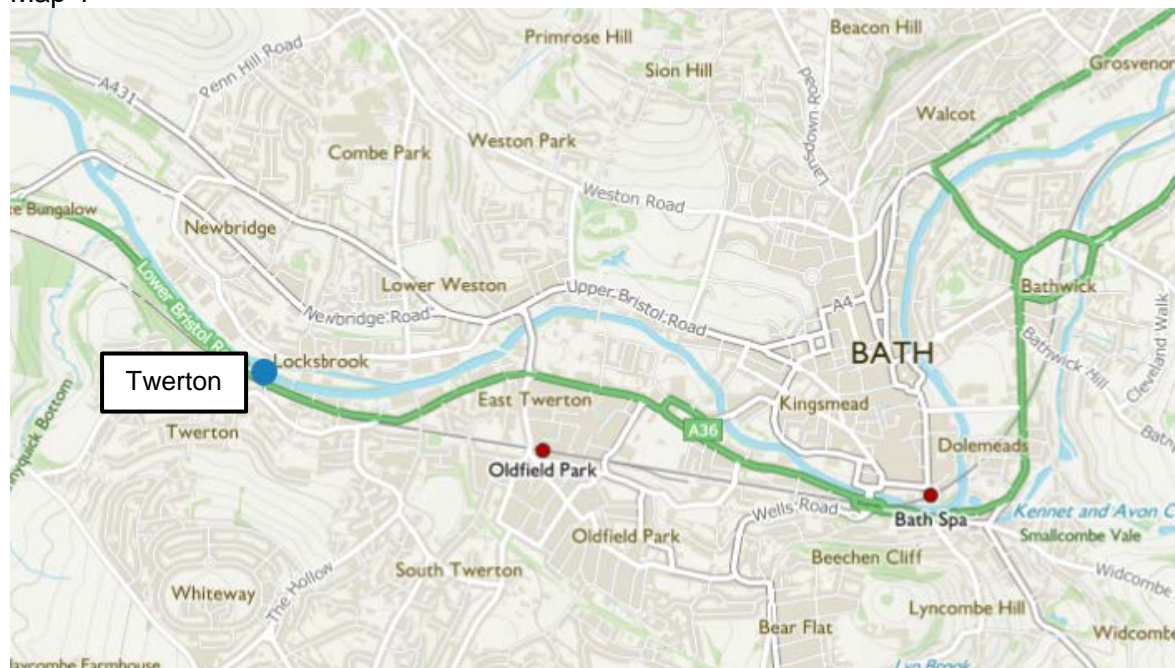
Photo 3



## Item 9 – Appendix 5 – Bath Flood Defence Scheme – Twerton Gate Levy Fact Sheet – Paper for: Decision

### Location Maps of Twerton Gate, Bath

Map 1



Map 2



### Background

Following significant flooding in the 1960's, the Bath Flood Alleviation Scheme (FAS) was constructed in 1974 and protects around 1165 properties from flooding. It consists of a large capacity engineered channel containing the River Avon and water control structures at Twerton and Pulteney. Even with this scheme, there are still around 500 properties currently at high risk of flooding in Bath. The main function of the gates are to maintain the river level through Bath, however the gates at Twerton also have an important flood risk management function. There are 2 gates at



## Item 9 – Appendix 5 – Bath Flood Defence Scheme – Twerton Gate Levy Fact Sheet – Paper for: Decision

Twerton, a radial gate and a vertical gate. Both gates are configured to open and close automatically to maintain consistent water levels in response to varying discharge.

### The Problem

The Bath FAS is now over 40 years old and the mechanical elements of the gates have exceeded their design life. Following a detailed condition assessment survey of Twerton and Pulteney in 2016, we identified that even with continued inspection, repair and maintenance, major investment is required within 10 years to avoid failure.

On the 3rd October 2019 Twerton Radial gate failed in the open position leading to a sudden drop in water levels through the centre of Bath, causing navigation difficulties and impacting boat owners. The gate has now been closed manually, returning the river levels to normal. However the radial gate can no longer operate automatically, significantly reducing the capacity of the channel and the flood risk management ability of the gates. An emergency plan has been implemented to repair the gates and manage flood risk in the interim. This highlights the critical condition of the gates and their vital function in water level control through the city.

In addition, the gates currently do not comply with the Eel Regulations 2009, so eel passage needs to be improved as part of the project. The structures do not incorporate a safe way to de-water the channel for maintenance work, so there is an opportunity to improve the safety of Environment Agency operational staff.

The work to replace Twerton Gates has been split in order to reduce construction cost and risk over the winter. We plan to deliver all the enabling works in year one and then replace/refurbish both gates in the second year. The current best estimate of cost is £8.2M with qualifying FDGiA and allocated Local Levy funding totalling £6.5M so the project is seeking an additional £1.7M. In addition to this request for £1.5M additional Local Levy, we are currently investigating other funding opportunities to bridge the funding gap.

### The Proposed Solution

The current scope for the capital scheme has been informed by the Bath River Avon strategy, which describes maintaining the current standard of protection. We will achieve this by refurbishing the existing vertical lifting gate, replace the existing radial gate and constructing a new control room. At the same time we will construct a concrete lifting pad, up-date the existing fish pass to include eel passage and install a new dynamic stop log system. The project will better protect 773 homes for the next 25 years. Bath and North East Somerset Council (BaNES) have already agreed to work in partnership with us on the Twerton project.

The main objectives of this scheme are as follows:

- Manage the risk of gate failure. As recently demonstrated, if the gates fail catastrophically in an open position, the river levels through Bath would drop rapidly, which could have a significant impact on the ecology, amenity, navigation and heritage of Bath city centre. This would have serious implications for the safety of river users as well as the reputation of the EA and BaNES.
- Protect at least 773 properties and prevent around £108m of damages caused by flooding compared to doing nothing over 25 years. Do this by replacing the gates to maintain the current standard of service.
- Reduce the cost of inspection and maintenance at the gates.
- Deliver environmental enhancements under the Water Framework Directive.

**Item 9 – Appendix 5 – Bath Flood Defence Scheme – Twerton Gate  
Levy Fact Sheet – Paper for: Decision**

## Funding

### *Current funding position (required to March 2022):*

<b>FDGIA</b>	£6.35M
<b>Levy (allocated)</b>	£0.12M

### *Additional funding requirement:*

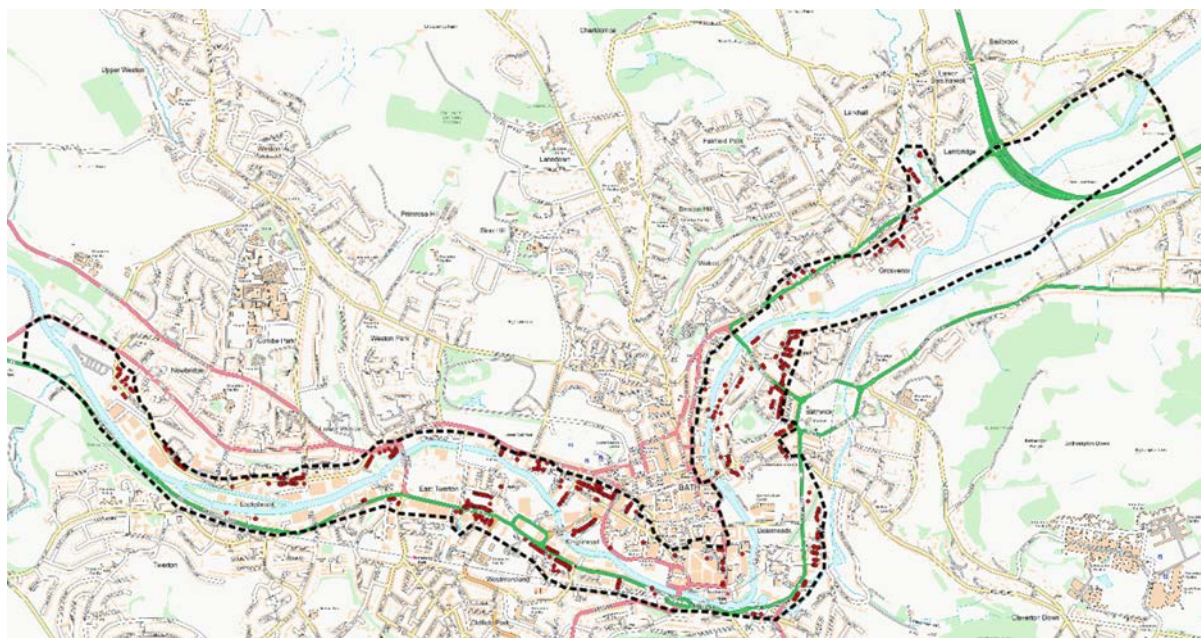
<b>Levy (requested)</b>	£1.5M
<b>Other PF (sought)</b>	£0.2M

## The Benefits

Key benefits of the scheme are to:

- 773 households better protected (OM2) to be claimed in 2021/22. Of which at least 26 are from the 20% most deprived areas and 52 from the 21-40% most deprived areas.
- Prevent around £108m of damages in Bath over 25 years.
- Maintain river levels through Bath, which has benefits for navigation, amenity, ecology and the heritage of the city.
- Improve the safety of the gates for our employees during inspection and maintenance.
- Improve fish and eel passage (in particular to comply with the Eel Regulations 2009).
- Reduce ongoing maintenance costs.

**Numbers of properties:**      773 OM2  
   10km OM4e



773 OM2's – Location Plan

### **What is Local Levy?**

The Wessex Regional Flood & Coast Committee (WRFCC) raise a levy on the County Councils and Unitary Authorities within the WRFCC boundary. The WRFCC use this levy to support local projects that are not considered to be national priorities that do not attract national funding through Flood Defence Grant in Aid (FDGiA). The WRFCC also use the levy to provide project contributions to secure national funding as part of the Partnership Funding approach.

Item 9 – Appendix 6 – Summer Lane Improvement Works  
Levy Fact Sheet – Paper for: Decision



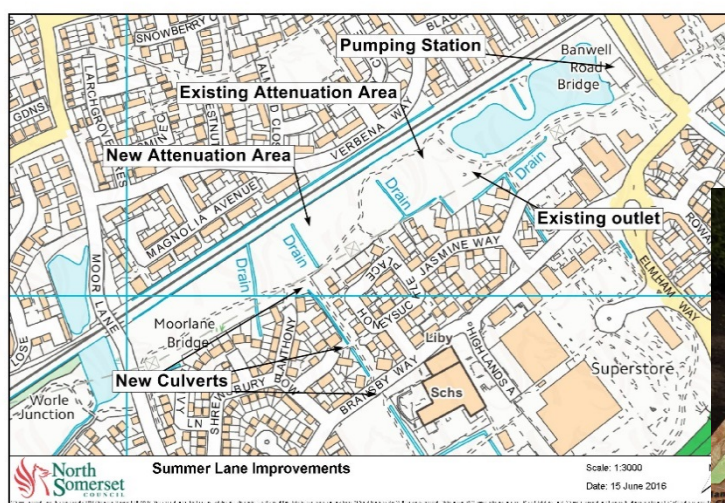
Environment  
Agency

# fact sheet

## Appendix 6: Summer Lane Improvement Works

Updated: December 2019

Local Authority: North Somerset Council



### Background

Summer Lane is located approximately 4.3km east of Weston-Super-Mare town centre. Twice in 2012 and in November 2016 significant flooding was experienced between Summer Lane and Moor Lane, Worle, Weston-super-Mare. It is a primarily residential area with some commercial units including a cluster of educational buildings near Bransby Way (Baytree School, Herons' Moor Academy, The Campus, and a library), the Locking Castle Church, and an area of shops. The catchment is low-lying with shallow gradients with its topographical low point in the south-west corner.

### The Problem

Significant flooding is experienced between Summer Lane and Moor Lane during periods of prolonged and significant rainfall. The flood mechanism centres on the Summer Lane attenuation ponds and Diamond Batch Pumping Station where, when the pond reaches its capacity, it then overflows from low points in its embankment onto the adjacent flat land. Much of this water then re-enters the surface water drainage system which is then pumped back into the ponds, when it then overflows again, creating a cyclical process. Both barriers and a pipeline have to be installed to reduce the risk to properties and a care home, and in so doing several properties escaped flooding, but the associated traffic congestion affects the M5 in both directions.



## Item 9 – Appendix 6 – Summer Lane Improvement Works Levy Fact Sheet – Paper for: Decision

The hydraulic model created as part of the scheme appraisal shows that a 1 in 100 year event would result in 85 properties being flooded. It has been observed that the existing ponds and pumping station system only have a standard of protection of between a 1 in 2 and 1 in 10 year event. As a result, many residential properties surrounding the ponds are susceptible to flooding.



### The Proposed Solution

The preferred option consists of raising the existing bunds on the existing wet and dry ponds to 6.00mAOD (relative to a surrounding ground height of approximately 5.50mAOD). A new dry pond (flood storage area) is to be constructed to the west of the existing dry pond by lowering the ground level to 4.75mAOD (a change in level of around 0.3-0.5m). A bund is to be added along the west and south sides of the new pond at a crest level of 6.00mAOD, tying into the level of the path. The changes to the design made this year to reduce costs are within the specification of the embankment and the reuse of the soils from the site where possible.

One 450mm diameter culvert is to be added between the existing dry pond and new dry pond, and another 450mm diameter culvert is to be added between the new dry pond and existing ditch to the south to provide a flow conveyance route. Three additional culvert crossings along this existing ditch are to be installed where existing culverts have failed or have capacity which is lower. Lastly a 450mm culvert will also need to be added under the Bransby Way road in order to link the drainage ditches.

### Funding Breakdown

The FDGiA funding for the project was approved in Sept 2017 and tenders for the project were received at the beginning April 2019. The total cost of the construction was greater than originally estimated. Therefore; a design revision has now been made to reduce the costs, whilst ensuring the scheme delivers the original outcomes, and additional funding has been secured from the Highways Authority, Parks and Open Spaces and Wessex Water.

Currently the project has an allocation of £180k from Local Levy. An additional £50k Local Levy contribution is requested, to ensure this project can proceed.

The revised funding is shown in the table below.

Funding source	2016/17	2017/18	2018/19	2019/20	2020/21	Totals
FDGiA		£60K	£31k		£400k	£491k
Local Levy		£35k	£100k		£95k	£230k
Parks and Open Spaces					£20k	£20k
Highways				£20k	£380k	£400k
Wessex Water					£200k	£200k
LLFA	£90k			£5k	£40k	£135k
<b>Total</b>						<b>£1,476k</b>

North Somerset Levels IDB will contribute to rhyme clearance works as part of the project.

**Item 9 – Appendix 6 – Summer Lane Improvement Works**  
**Levy Fact Sheet – Paper for: Decision**

## The Benefits

Besides benefiting properties there are environmental enhancements which are part of the scheme:

- Bird and bat boxes
- Hibernacula – reptiles / Great Crested Newts / hedgehogs
- Habitats – native species planting (meadows, wetland/ riparian, shrubs, trees) – nectar-rich, fruit bearing species – of benefit to foraging wildlife.

Numbers of properties

Flood risk	Before	After	Change due to scheme
Moderate risk	9	1	-8
Significant risk	53		-53
Very significant risk	32		-32

### **What is Local Levy?**

*The Wessex Regional Flood & Coast Committee (WRFCC) raise a levy on the County Councils and Unitary Authorities within the WRFCC boundary. The WRFCC use this levy to support local projects that are not considered to be national priorities that do not attract national funding through Flood Defence Grant in Aid (FDGiA). The WRFCC also use the levy to provide project contributions to secure national funding as part of the Partnership Funding approach.*

<b>Item 10a – Wessex 2020/21 Flood Defence Grant in Aid (FDGiA) Revenue Maintenance Allocation - Paper for Discussion</b>
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**Appendix 1 :** *Asset Management: what is asset management and how do we apply it in the Environment Agency*

**Appendix 2:** *2019/20 Wessex Maintenance Programme*

**Appendix 3** *Key Performance Indicators (KPIs)*

**Appendix 4:** *Wessex Revenue Efficiency Plan*

**Appendix 5:** *Wessex Engagement Programme*

**Paper by: Piers Hooper, Local Delivery Lead**

**Subject: Wessex 2020/21 Flood Defence Grant in Aid (FDGiA) Revenue  
Maintenance Allocation**

**Recommendations:**

The committee is asked to:

1. Note the 2019/20 indicative allocation and implications for asset management work in Wessex.
2. Note the wider challenges and achievements, especially the disparity between funding of urban and rural areas.
3. Discuss whether any changes are needed to the way maintenance money is allocated.

**1.0 Introduction**

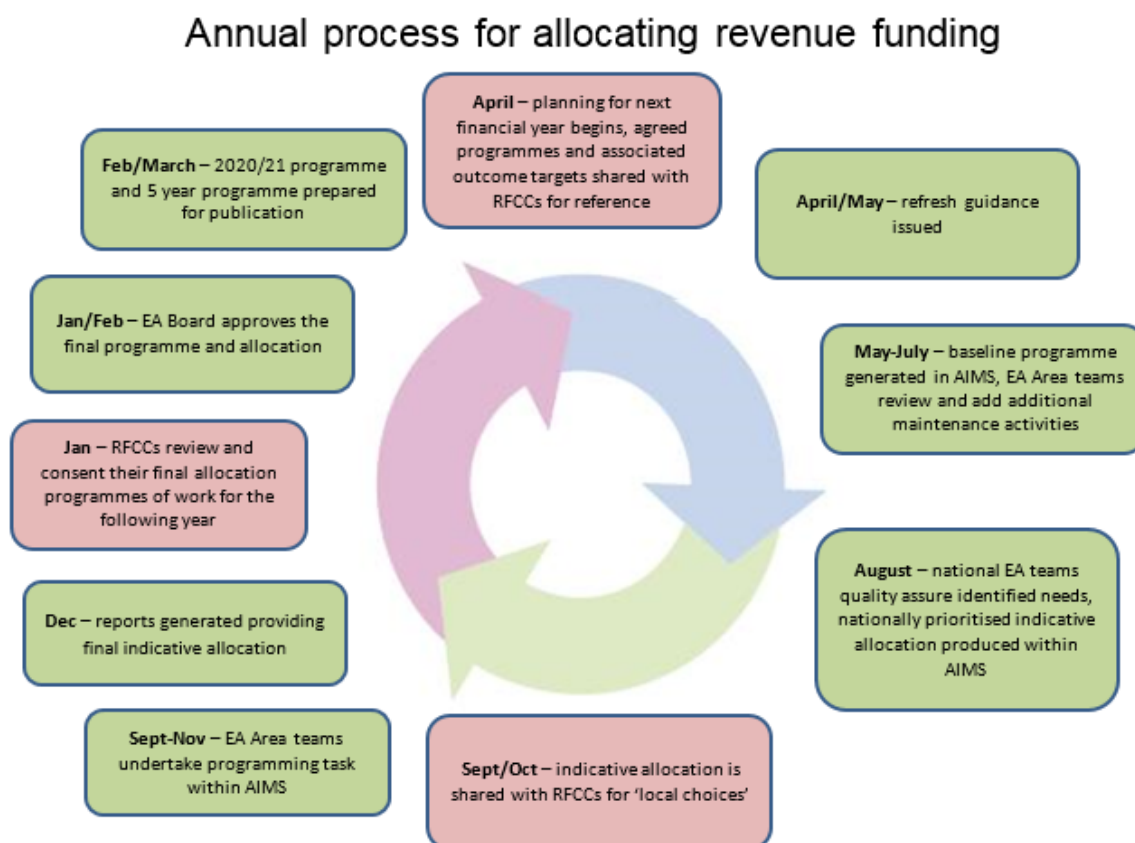
- 1.1 The Draft National Flood and Coastal Erosion Risk Management Strategy for England sets out a Vision for a nation ready for, and resilient to, flooding and coastal change – today, tomorrow and to the Year 2100. The management and maintenance of our flood risk management assets is a key part of ensuring that communities are more resilient. Appendix 1 explains our approach to asset management and places our maintenance in the context of the asset management life cycle.
- 1.2 We are provided with Flood and Coastal Risk Management Grant-in-Aid (FCRM GiA) revenue money to operate and maintain flood defence assets. We are not obliged to carry out maintenance unless we have a specific legal duty at a site; we use our permissive powers under the Water Resources Act to maintain conveyance and manage flood risk in main rivers.
- 1.3 The Environment Agency's annual maintenance programme includes a range of activities that are prioritised and timetabled using information from inspections, maintenance standards, levels of flood risk, and from legal and statutory obligations. We prioritise work on rivers that pose the greatest flood risk for people, homes and businesses.
- 1.4 This paper explains how funding is allocated and explains what this means for Wessex with a particular emphasis on Somerset. Given the complexity of this subject, this paper is longer than usual Committee papers.

**Item 10a – Wessex 2020/21 Flood Defence Grant in Aid (FDGiA) Revenue Maintenance Allocation - Paper for Discussion**

**2.0 How we are funded to manage our assets**

- 2.1 Every year in the summer, we put in a Wessex area bid to cover the costs of the maintenance programme we want to do for the following financial year (*see figure 1 bidding cycle diagram*). We are usually then given an indicative allocation for the following financial year in the autumn, and the allocation itself in the spring. How much money is available to be shared out between the areas depends on the total *GiA settlement from government for the year*.
- 2.2 In 2020/21 the Government are investing £110 million in revenue maintenance. The Wessex allocation is £7.42 million.
- 2.3 We also have annual asset recondition funding. This comes from our FCRM GiA capital funding, but is used to repair existing assets rather than build new ones. In 2019/20 our asset recondition allocation was £724k.

*Figure1: bidding cycle diagram*



- 2.4 Defra gives us a national steer to prioritise protection of houses and businesses. Alongside this, we also have a number of statutory and other obligations that need funding. Since 2016 we have been using a national bidding and allocation system called AIMS (Asset Information Management System). AIMS allows us to interpret this government policy across the country consistently and prioritise maintenance work based on the following criteria:

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- Cost benefit (the cost of a maintenance activity compared to the number of houses and value of property within the catchment).
- The type of activity, e.g. mechanical and electrical checks attract more funding than cutting grass on a bank.
- The ‘target condition’ of the asset. Assets of higher flood risk importance, like reservoirs, get more money as they are given higher target conditions than those with lower flood risk importance, such as water level management structures.

2.5 As well as this, where we have safety, environmental, riparian or other legal obligations, we classify assets that provide these functions in the bid so that they are prioritised.

### 3.0 Scheduled allocation

3.1 The table in figure 2 sets out the scheduled allocation for the 19/20 and 20/21 financial years by activity, and the unscheduled allocations. A more detailed breakdown of the 2019/20 maintenance programme is provided in Appendix 2 These are the biggest allocations we have had for many years; in previous years our allocation was steady at around £5.5m, but has risen significantly under the current Spending Review (SR16) period. The extra money allows us to do more intermittent work, such as minor repairs, desilting, surveying and investigations. It should also be noted that operating costs (including contractors and materials) have increased above inflation during the current Spending Review period.

*Figure 2: scheduled allocations by activity*

AIMS Activity Type	Conveyance	CCTV Inspection	MEICA	Operational Checks	Grass Cutting	PSRA	Other	Intermittent	Unscheduled Works	Total
19-20 Allocation (£k)	1,056	427	623	875	1,619	130	1,375	974	650	7,729
20-21 Indicative (£k)	1,354	266	404	1,120	1,670	187	356	1035	1029	7,421

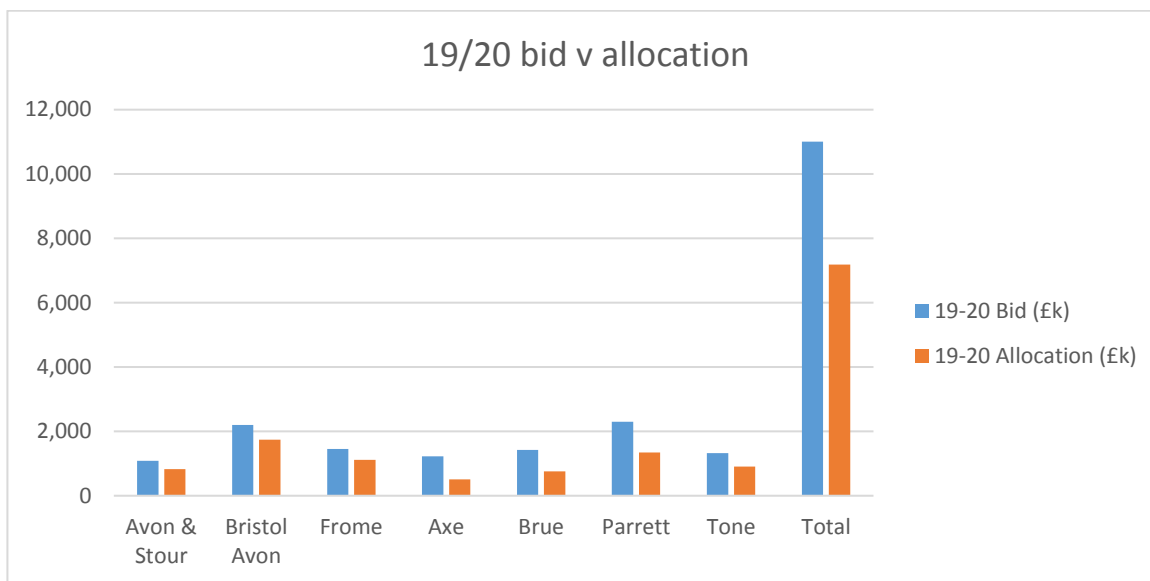
3.2 The table and graph in figure 3 shows the amounts bid for in each catchment area compared to the allocation received.

*Figure 3: bids compared to allocations by place*

	Avon & Stour	Bristol Avon	Frome	Axe	Brue	Parrett	Tone	Total
19-20 Bid (£k)	1,086	2,196	1,450	1,222	1,424	2,303	1,320	11,001
19-20 Allocation (£k)	827	1,739	1,113	508	756	1,340	903	7,186

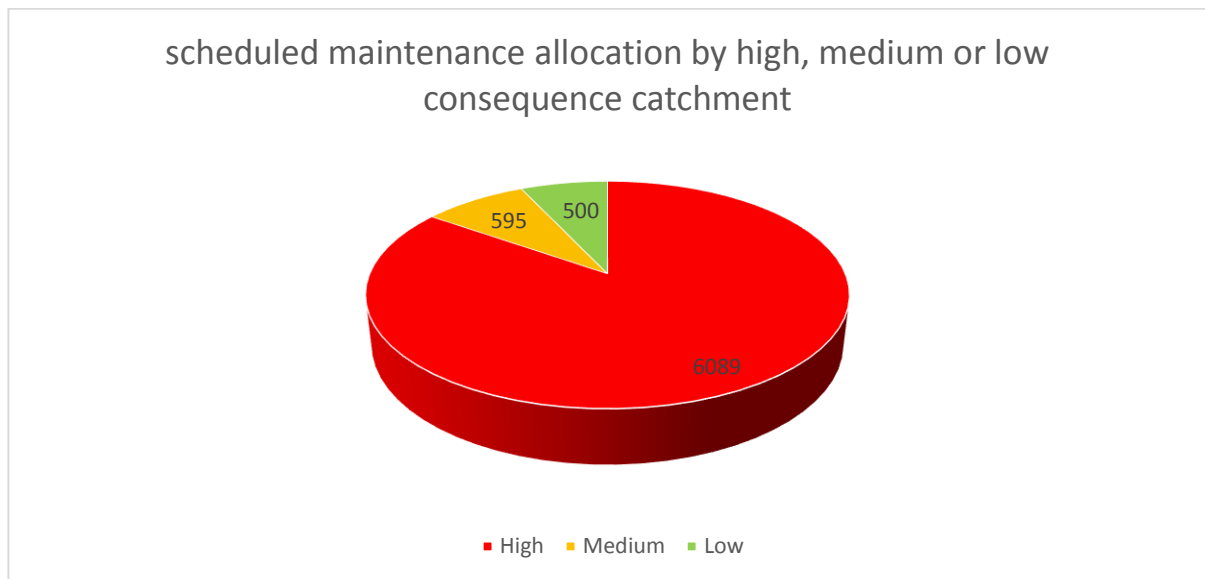


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- 3.3 Because of the way in which money is allocated under AIMS as described above in section 1, the Somerset area gets a lower proportion of the funding it applies for than the Bristol Avon and South Wessex areas.
- 3.4 Whilst the Somerset Moors and levels are a highly engineered system with embanked rivers and a network of sluices and pumping stations. There are 20 pumping stations operating in Somerset (compared to 1 in Bristol Avon), most of which were designed and constructed in the mid 20<sup>th</sup> Century. All these stations are expensive to maintain and run, and are major source of carbon emissions. They are at or beyond their design life and need to be replaced in the near future. Under current flood risk management funding rules we cannot secure all of the capital funding required to replace these assets. As a consequence we have to patch and repair these assets to extend their life. This is a sub-optimal approach to asset management; it is more costly and is not sustainable in the long-term. As a result we are seeing more asset failures across our asset base particularly in Somerset.
- 3.5 By contrast, rivers in Bristol Avon or South Wessex tend to protect greater property values and/or have fewer control structures per kilometre of river. This means operations and maintenance in Somerset has a lower cost benefit ratio and therefore tends to get less funding per asset or kilometre of river.
- 3.6 This effect can be exacerbated by the fact that because capital schemes are also subject to cost benefit assessment (albeit by a different means), we build more flood defences in higher population density areas, which in turn attract a greater proportion of available maintenance funding.
- 3.7 In addition to this, the majority of funds are allocated to the higher consequence (more populated) catchments within these areas. Figure 4 below shows the extent to which this occurs across Wessex.

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*Figure 4: scheduled maintenance allocation by high, medium or low consequence catchment.*

#### **4.0 Maintaining Conveyance on our Rivers**

- 4.1 Dredging is an important part of our maintenance programme. We consider each location carefully and do it where we know it will make a difference. Understanding where dredging will – and won't – reduce flood risk is key. In some cases dredging isn't the best long-term solution because rivers can quickly silt up again.
- 4.2 We plan dredging work where it's technically effective, good value for money, does not significantly increase flood risk for others downstream and is environmentally acceptable. The effectiveness of dredging varies substantially from river to river and we assess it on a location by location basis. Dredging is just one of a number of tools that can be used by ourselves and others to manage flood risk. Other methods could include the provision of better flood storage upstream, slowing down the flow of water using land management techniques or building traditional hard defences such as flood walls.
- 4.3 In Somerset we undertake an extensive weedcutting programme to maintain river channel capacity. This is supplemented by intermittent dredging on some rivers.
- 4.4 In urban areas we also carry out an extensive culvert inspection and cleansing programme (silt and debris removal) on culverted rivers (rivers flowing underground in designed pipes) to ensure that the culvert conveys water as designed.

#### **5.0 Unscheduled allocation**

- 5.1 Around 90% of our maintenance allocation is attached to a scheduled activity in a particular location (for example, weed cutting on one side of the River Parrett twice a year between June and October). The remaining 10% is not attached to any specific activity. We use this money to 'top-up' funding for essential works where AIMS hasn't provided enough money for the specific activity bid for, and to do more high priority work.

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5.2 The unscheduled money will be spent on the following priority activities:

- Inspecting and maintaining bridges (required for safety)
- Enhanced inspections of mechanical and electrical assets.
- Preparing for incident response at major assets.
- Delivering incident response when assets fail or are exceeded.

5.3 We are able to decide what the best way to spend the unscheduled money is locally, provided we can demonstrate we spend it where it will protect the greatest value of property.

*Figure 5: unscheduled allocation spend in 19/20*

Activity	cost
Enhanced mechanical & electrical inspections	£116k
Bridge inspection & maintenance	£374k
Incident preparedness	£85k
Incident response	£75k

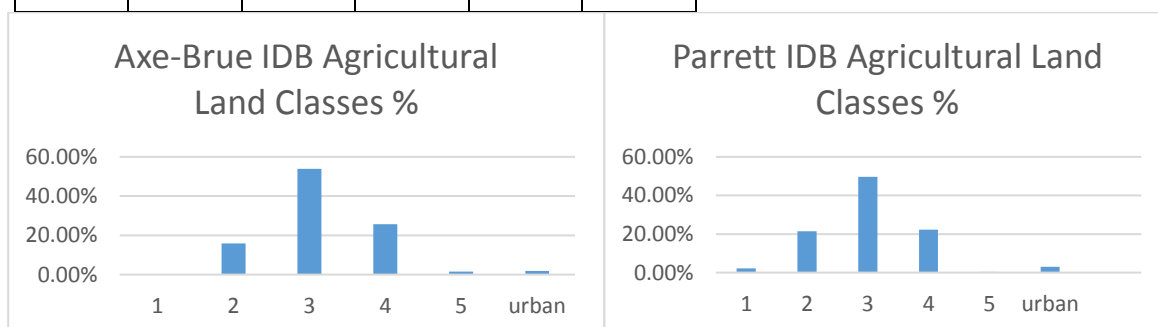
## 6.0 How AIMS allocates in Somerset

6.1 As mentioned in Section 2, the value of property is a part of the calculation to determine how much benefits are derived from preventing flooding. Agricultural land is valued, but at a much lower rate than residential houses, for example, which are valued at £6k compared to £1,160 for a hectare of class 1 agricultural land. The table below shows how agricultural land is classed and valued.

6.2 79% of agricultural land in the Axe-Brue catchment and 72% in the Parrett catchment is Grade 3 or below. This means that Somerset receives less funding than other lowland catchments in England (eg The Fens) where there is a much higher proportion of Class 1 agricultural land.

6.3 Thus the relatively low numbers of properties at risk combined with the nature of agriculture in Somerset results in lower levels of funding than for other parts of Wessex.

	ALC Grade				
	1	2	3	4	5
£/ha	1,160	770	280	50	20



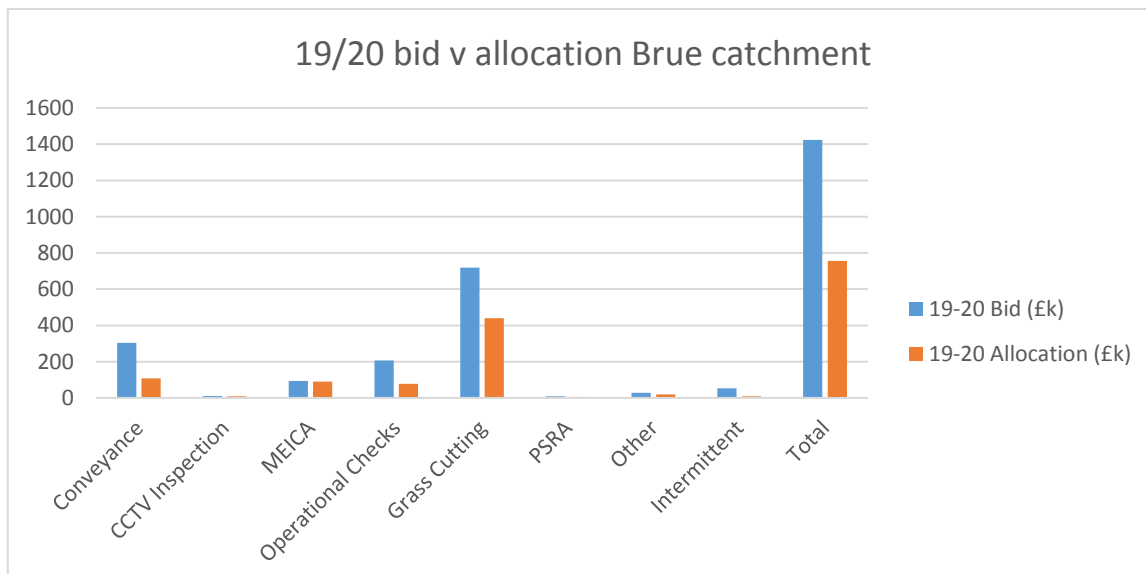
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<u>Axe-Brue IDB</u>	<u>Parrett IDB</u>
Grade 1 - 0.004%	Grade 1 - 2.10%
Grade 2 - 15.97%	Grade 2 - 21.37%
Grade 3 - 53.86%	Grade 3 - 49.65%
Grade 4 - 25.67%	Grade 4 - 22.31%
Non agri - 1.53%	Grade 5 - 0.40%
Urban - 1.88%	Urban - 3.09%

*Figure 6: Agricultural Land Classes (Penning-Rowsell et al., 2005).*

- 6.4 Because of the way in which AIMS allocates, as described in Section 2, we tend to need to use a larger percentage of unscheduled allocation in Somerset, because of the low density of housing and relatively high length of main river.
- 6.5 In 18/19 when we had a lower overall allocation, we had to use all the money from the unscheduled allocation to pay for the maintenance programme in the Brue. This effectively means that lower cost benefit catchments and assets are subsidised by other catchment areas, which would otherwise benefit from unscheduled allocation.
- 6.6 In 19/20 we were well funded everywhere, but the relatively bigger difference between what we bid for and what we're allocated means that the Somerset catchments would be under the most pressure if overall national funding went down.

*Figure 7: bids by activity compared to allocation in the Brue catchment*



## 7.0 Asset recondition

- 7.1 Alongside our annual bid for money to operate and maintain assets, we also submit a bid for asset recondition. This money is used where we have inspected an asset and found it to be in poor condition and in need of repair. Recondition projects are between £5k and £250k.

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- 7.2 As with maintenance funding, a cost benefit formula is applied. This means that we don't always get allocated the funding to repair assets, which often results in more maintenance money having to be spent to keep the asset functioning.

**8.0 What we are achieving**

- 8.1 In 19/20 the maintenance work we did allowed us to operate and maintain 2049 fixed assets and 2420 km of linear flood defences. Providing optimum maintenance also allows us to maintain assets at high standard, delaying the need for capital investment until the appropriate time. We are progressively contracting out more maintenance as we upskill our field staff and focus them on the highest risk activities.
- 8.2 In 19/20 we are out sourcing £323k, or 4.1% of the programme to our framework contractors. This is slightly more expensive than using our field teams, but allows us to do more incident preparedness and focus more of our time on the major assets.

**9.0 IDB Precept**

- 9.1 Precept money paid to us by the IDB in 19/20 was £587k. The 2% increase agreed for next year will mean a payment of £598k in 20/21. We use £120k to cover the cost of 3 staff in our Asset Performance Teams. This ensures we have enough people to deliver the maintenance or repairs that is paid for using precept.
- 9.2 In the past we have normally used the remaining IDB precept to 'top-up' catchments in the rate-paying area of Somerset that don't attract enough money from GiA.
- 9.3 Precept money is always ring-fenced for spending in the IDB district only. Depending on the annual allocation, the amount of precept used was usually around £180k in the Parrett catchment, £120k in the Tone Catchment, £80k in the Brue catchment and £60k in the Axe catchment.
- 9.4 Because the bigger GiA maintenance allocation in 19/20 covered the maintenance programme adequately, we were able to use the precept to repair 9 of the most critical assets uneconomic assets within the rate-paying area that we couldn't get GiA capital funding for. The assets we repaired/are repairing using this money are listed below in figure 6:

*Figure 8: assets repaired/to be repaired using IDB precept in 19/20*

<b>Uneconomic asset</b>	<b>Precept spent</b>
R Parrett Wall 2769	£55,000.00
Brean Cross	£140,000.00
Gold Corner PS	£6,040.41
North Drain PS	£10,000.00
North Drain Diesel Tank	£15,000.00
Bruton Flood Storage	£10,000.00
Hackness Sluice	£54,400.04
Highbridge Clyce 1	£34,000.13
Highbridge Clyce 2	£34,000.00

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9.5 If the current indicative allocation is confirmed, we would again be in a position to take a similar approach, meaning we can increase reliability and resilience for those lower cost benefit assets and catchments.

**10.0 Somerset Rivers Authority (SRA)**

10.1 Somerset Rivers Authority is a partnership between Somerset's existing organisations with a role in flood Risk Management. The SRA's purpose is to provide a higher standard of flood risk management than is affordable from the individual budgets of each organisation. The SRA raises extra money to deliver extra work.

10.2 We have delivered projects on behalf of the SRA since 2016, including pumping station housing refurbishments, installation of temporary pump or generator standings, desilting and other activities. None of these projects would have been possible without SRA funding because of the low priority assigned by AIMS.

**11.0 Spending Review 2019 (SR19)**

11.1 Defra have discussed with us what we could achieve if we had an increase in funding following a likely winter budget. We don't yet know if any extra money will be available, but we have put forward a proposal for accelerating existing capital schemes, an enhanced asset refurbishment programme, and extra maintenance, so that we are in a good position to take advantage of any extra money if and when it comes.

**12.0 Other liabilities and activities**

12.1 In addition to asset maintenance, we also fund other activities from the maintenance budget, including:

- **Public Safety Risk Assessment (PSRA).** We regularly inspect our assets and assess the risk they pose to third parties. We put in place control measures including fencing and signage to reduce the risk to others.
- **Incident response preparation.** Responding to incidents is one of our top priorities, and it's important to us that we are well prepared if one of our assets is exceeded or fails. We aren't given a scheduled allocation for this, so we use unscheduled allocation to fund it where required.
- **Water level management.** On the Somerset Levels and Moors, we operate pumping stations and tilting weirs to ensure water levels are maintained according to local agreements with the IDB. This helps provide wet fencing, cattle watering and environmental benefits.

**13.0 How we measure success (*see appendices for more detail*)**

- **Key Performance Indicators (KPIs).** Defra sets us annual targets for repairing assets: most of the money to fix these assets comes from FCRM Capital GiA, but the maintenance budget also makes a significant contribution. Higher cost benefit assets are treated as priority. Appendix 3 provides more information on our performance indicators
- **Efficiency targets.** As part of our revenue maintenance settlement in Spending Review 16, we agreed with Defra that we would deliver a 15% efficiency. Wessex is currently the top performing area in the country. Appendix 4 provides more information on the Wessex revenue efficiency target and achievements.

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- **Asset management accreditation.** In December 2018, the Environment Agency was awarded ISO 55000 accreditation, following a rigorous audit. Wessex was one of just 3 areas that were audited nationally. Achieving and maintaining the accreditation allows us to demonstrate we are competent asset managers and get good value for public money.
- **Public engagement.** We engage with communities where we do maintenance so that they understand why we are doing it, what the issues are and how it benefits them. It's harder to measure the success of this, but we believe it's very worthwhile. Appendix 5 provides more information on the Wessex engagement programme.

#### **14.0 Current and future challenges and opportunities**

- 14.1 There are a number of challenges and opportunities that we need to address over the next few years to ensure that our asset management and maintenance remains relevant particularly given the increased flood risk associated with climate change.
- **End of design life and uneconomic assets.** Many of our flood defence assets in Wessex were built between the 1940s and 1960s. Most of these assets have long since reached the end of their design life and are now failing at the fastest rate we have known. Wessex also has by far the highest proportion of uneconomic (those with a cost benefit ratio of <1) assets in the country, 25% of the total. This has meant that we have not been able to get funding to fix or replace them over the years, leading to 'sub-optimal' decision making from an asset management perspective. The lower maintenance funding we had before SR16 has contributed to the current situation because less maintenance leads to quicker depreciation. Now that we have a higher maintenance allocation we have been playing catch-up and getting a lot of inspection, surveying and investigations done that we couldn't previously afford. We hope to get an improved asset recondition fund following the SR19 announcement, and have submitted an ambitious bid to do this. Much of this bid is focussed in Somerset, including a number of low cost-benefit and uneconomic assets.
  - **Rising costs of materials and supply chain.** It has been challenging to achieve efficiencies whilst the costs of bought-in staff, contracting work out and materials have all risen above inflation.
  - **Continuous improvement of our health, safety and wellbeing practices.** Along with the construction, and operations and maintenance industries in the private sector, we have come a long way in improving standards for our staff and supply chains. We think one lost day through injury or stress is too many. We want to lead the way and make Wessex a safe, inclusive and enjoyable place to work. Improving standards sometimes makes maintenance more expensive, but we know that our 'human capital' is our biggest asset and worth investing in.
  - **Carbon.** The increasing focus on climate change driven by carbon emissions, the effects of climate change on the environment and flood risk, and the Environment Agency's target to become carbon neutral by 2030 mean that we want to demonstrate that we are doing everything we can to reduce and offset our emissions. At the moment, we assess our own fleet and supply chain's carbon credentials, but we don't take carbon into account when prioritising maintenance. We are currently working with our operational framework suppliers to make sure carbon assessments are done for every major project.
  - **Funding settlements.** SR16 gave us a 4 year revenue funding settlement, which allowed us to plan maintenance better. The current SR19 is only for 1 year, meaning we can't plan beyond the following financial year with any certainty. This summer in Wessex we hosted a visit from Defra, Treasury and Infrastructure Projects Authority staff where we provided feedback on how

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much more we could do if we could achieve longer-term 'totex' settlements instead of shorter term separate 'capex' and 'opex' settlements.

- **Catchment approach.** We have been investing more time in how we can do more in the Environment Agency on a catchment-based approach. This means looking at all our regulatory, advisory and delivery work on a geographical basis and planning what we will do and when we will do it. Because of the size of the organisation and the range of different things we do, this is a big challenge, but we know it will help us plan activities better internally and plan investment more effectively with partners.

## **15.0 Conclusion**

- 15.1 The Environment Agency delivers government policy and is accountable to central government as well as local partners.
- 15.2 National steer remains to focus on those assets that protect higher property values. The AIMS allows us to do that consistently across England and within Wessex. Demonstrating to a wide variety of stakeholders within a varied area that money is being most effectively spent on water management will always be a challenge, particularly in an area where communities rely on ageing assets that are no longer prioritised for operation and maintenance nor capital improvements.
- 15.3 As professional asset managers, we are striving to deliver the best value for public money. We have been highlighting the risks associated with short-term funding settlements and lower capital and maintenance funding in more rural areas with our national teams for some years, and we hope to make significant investments in asset refurbishment in the coming years if extra resource is allocated in SR19.
- 15.4 We are open to debate locally on how effectively we are interpreting government policy and welcome any steer from the Committee on ways in which we might be able to improve allocation of funds to manage assets within the current framework.

## **16.0 Recommendations**

The committee is asked to:

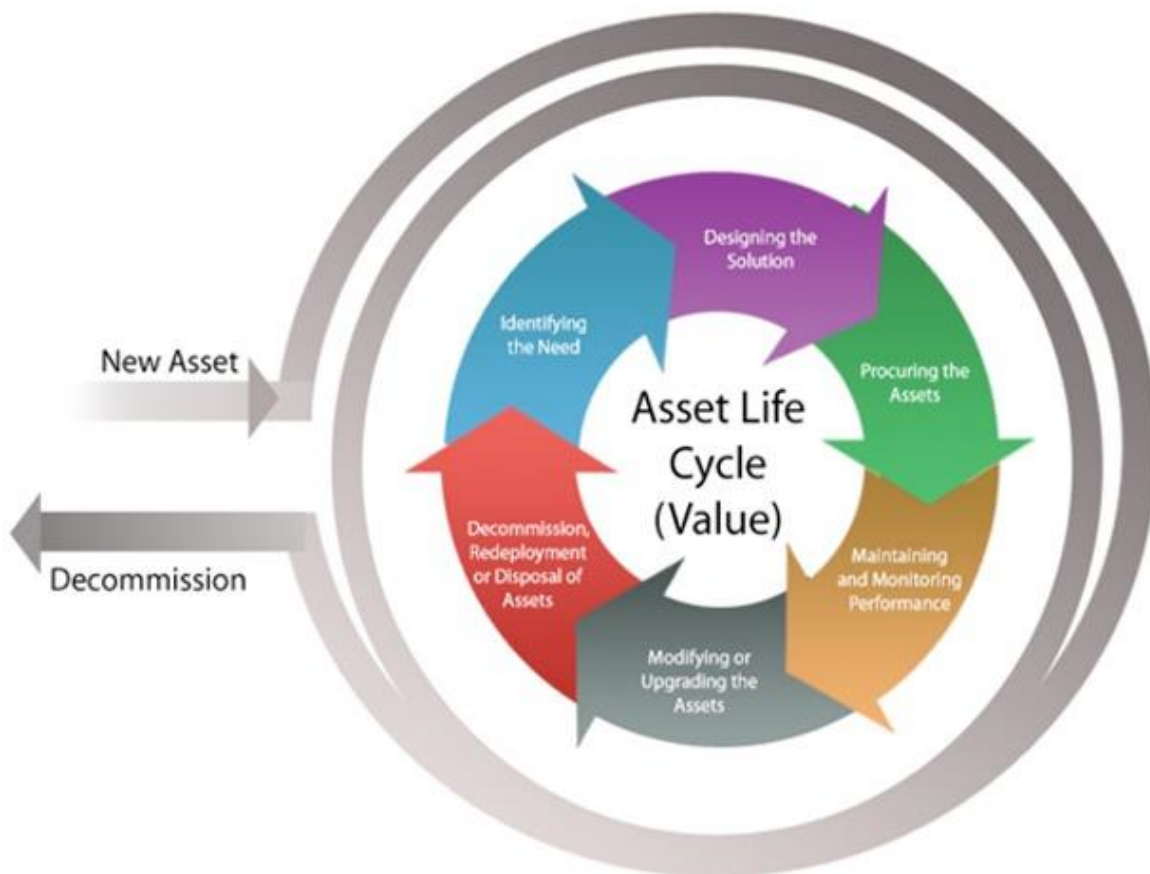
1. Note the 2019/20 indicative allocation and implications for asset management work in Wessex.
2. Note the wider challenges and achievements, especially the disparity between funding of urban and rural areas.
3. Discuss whether any changes are needed to the way maintenance money is allocated.



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**Appendix 1: Asset Management: what is asset management and how do we apply it in the Environment Agency**

Asset management is a systematic process of developing, operating, maintaining, upgrading, and disposing of assets in the most cost-effective manner. Figure 6 below illustrates the asset management life cycle.



*Figure 13: the asset management life cycle.*

The Environment Agency has developed its own FCRM 5 year asset management strategy, which sits underneath the Defra 25 year plan.

*“Asset management is about making the most of the resources we have and gaining best value from the work we do. In terms of flood and coastal risk management this means ensuring we plan and deliver investment to gain the most effective reduction in flood risk to the public and infrastructure.” Environment Agency 2018 (online) “Our Flood and Coastal Risk Management assets reduce the likelihood and impacts of flooding to the public, to infrastructure and to the economy. A strong asset management capability is central to effectively and efficiently delivering our long-term outcomes by enabling timely, risk-based investment; our approach will deliver value for money, be rational, consistent and evidence based. We aspire to be at the forefront of asset management internationally; we aim to manage our FCRM assets to best practice standards, providing the resilience that communities expect, and improving the health, safety and wellbeing of all.” John Curtin, Executive Director Flood and Coastal Risk Management June 2016.*

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*Our vision is to develop FCRM within the Environment Agency to the forefront of asset management internationally - to be recognised as an industry leading asset management organisation (Environment Agency FCRM 5 year Strategy 2018).*

The following is an extract from our 5 year asset management strategy.

*This **Statement of Principles** sets out the high level intention for FCRM asset management in order to achieve our organisational FCRM objectives. We will:*

- *Maximise the **value** to the nation from investment in FCRM assets.*
- *Ensure our FCRM asset management activities are carried out in a **legally and environmentally** compliant and responsible way; in accordance with our current **Health, Safety and Wellbeing** Policy Statement.*
- ***Optimise** investment through **sustainable** and **whole life-cycle** principles and **manage risks** in a cost effective, responsible and proactive way using consistent ways of working.*
- *Equip and develop our FCRM staff to achieve their potential and continually improve their **competency** in asset management by employee engagement and investment in **training and development**.*
- *Collect and maintain **reliable data** to inform evidence based decision making and provide **information** to the public about our asset management activity*
- *Seek **continual improvement** by seeking and supporting **innovation** and sharing FCRM best practice nationally and internationally*
- *Establish, maintain and review FCRM **asset management objectives**, plans and the organisational structure, **roles and responsibilities** for controlling, directing and delivering FCRM asset management*
- *Seek **sustainable outcomes** from our FCRM asset management activities that considers the environment, economy and society in our measure of sustainability.*
- ***Work with others** to achieve more together by sharing resources, expertise and best practice to achieve mutual objectives and benefits.*
- *Build strong **relationships** with contractors, suppliers and other operators to support our FCRM asset management approach.*

For more information about asset management, visit the [Institute of Asset Management](#).

# Wessex Regional Flood and Coastal Committee Meeting

14 January 2020

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**Appendix 2: 2019/20 Wessex maintenance programme** The table in figure 13 shows the detailed breakdown of costs and activities.

Type	Activity	Cost £
Intermittent	Access Improvement Works	17,000
Routine	Badger Monitoring	1,500
Routine	Bridges	374,000
Routine	Coastal Works	200,000
Intermittent	Concrete/Masonry Repair	107,500
Intermittent	Confined Space CCTV	393,000
Routine	Confined Space Man Entry	31,924
Routine	Debris/Obstruction Remove	236,571
Intermittent	Desliting/Dredging	219,000
Intermittent	Embankment Repairs	168,207
Routine	Environmental Enhancement	14,557
Intermittent	Flap Gate/Board Replace	30,121
Routine	Flood Patrols	30,858
Routine	Grass Cut (Hand)	119,098
Routine	Grass Cut (m)	581,761
Routine	Grass Cut 2 (m)	650,780
Routine	Grass Cut 3 (m)	304,348
Routine	Grass Cut Additional (m)	69,178
Routine	Incident Response	34,375
Routine	INNS Removal	34,250
Routine	MEICA Building/Grounds	2,500
Routine	MEICA - Maintenance	248,612
Routine	MEICA - PPM	415,338
Routine	Maintain Access to Asset	62,074
Routine	Maintenance Check	862,647
Routine	Operational Check	601,467
Routine	PSRA Fencing	32,464
Routine	PSRA Inspection	13,100
Routine	PSRA Other	5,902
Routine	Repair Vandalism Damage	2,500
Routine	Repairs Burrowing Animals	657
Routine	Reservoir Inspection S10	18,995
Routine	Reservoir Inspection S12	32,217
Routine	Revetment/Erosion Repairs	39,000
Routine	Sealant Replace/Repair	3,000
Routine	Screen Replacement/Repair	1,404
Routine	Servicing	125,000
Intermittent	Structural Ground Condition Insp	545,070
Routine	Tide Watch	32,486
Routine	Topographical Surveys	234,620
Routine	Tree Work	68,486
Routine	Vermin Control	11,376
Routine	Water Levels Check	146,830
Routine	Weed Cut (hand)	107,901
Routine	Weed Cut (m)	460,119
Routine	Weeds Spraying (not INNS)	37,422
<b>Total</b>		<b>7,729,215</b>

Figure 13: detailed activity/cost breakdown.

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**Appendix 2** (continued): The tables in figure 14 show the money spent according to high (more densely populated), medium or low (less densely populated) consequence catchments. Information on the maintenance being done in a particular place can be found [here](#).

*Figure 14: maintenance activity by high, medium and low system (catchment)*

Type of Work - 19/20 Indicative Allocation (£k)													
	Frequent Maintenance					Intermittent Maintenance							
System Risk	Conveyance	Conveyance - Dredging	MEICA	Operation	Structures & Defences	Conveyance	Conveyance - Dredging	MEICA	Operation	Structures & Defences	Support Schemes	Unscheduled	FDGiA Allocation Total
High	1102	0	488	1383	2098	412	178	0	0	428	0	545	7729
Medium	9	0	68	167	290	7	1	0	0	53			
Low	25	0	67	114	259	8	0	0	0	27			

Type of Work - 20/21 Indicative Allocation (£k)													
	Frequent Maintenance					Intermittent Maintenance							
System Risk	Conveyance	Conveyance - Dredging	MEICA	Operation	Structures & Defences	Conveyance	Conveyance - Dredging	MEICA	Operation	Structures & Defences	Support Schemes	Unscheduled	FDGiA Allocation Total
High	896	0	247	1263	1821	192	78	0	0	680	233	1029	7420
Medium	156	0	24	100	110	16	1	0	0	104			
Low	109	0	30	78	225	22	0	0	0	7			

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### Appendix 3: Key Performance Indicators (KPIs)

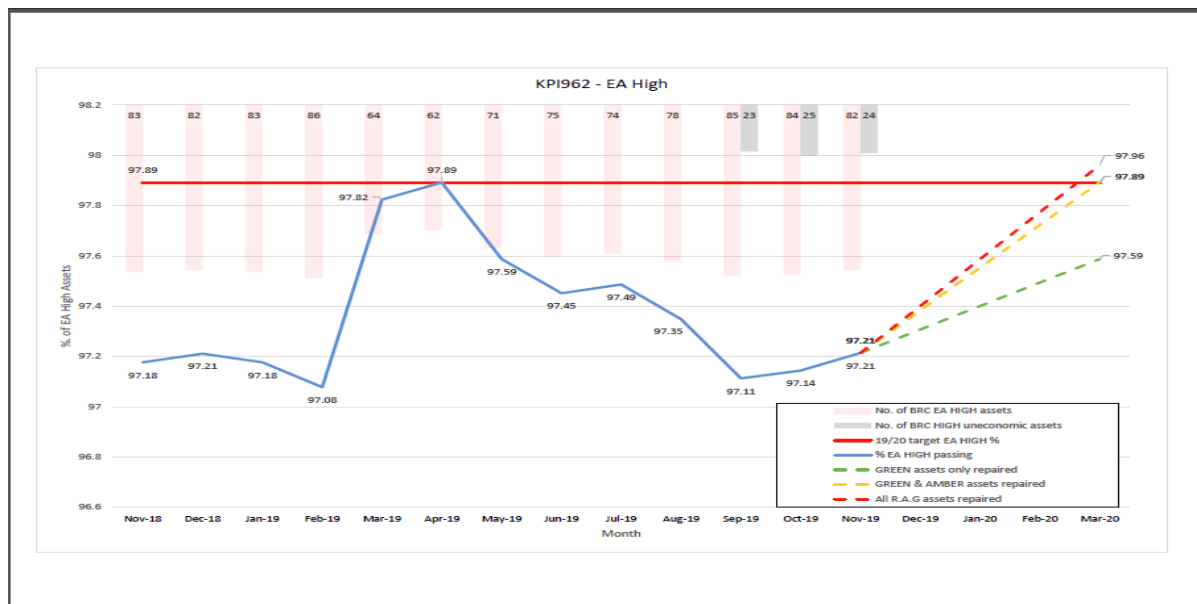
We report on a number of different ‘corporate scorecard’ measures to Defra. The main measure Defra use for asset management is the Below Required Target Condition (BRC) measure. This is a percentage score for the number of assets that are at or above their target condition. Assets are inspected regularly and if an element of an asset is damaged or in a state of disrepair, it is listed as BRC. We then bid for money to repair the assets and return them to target condition.

Many assets in Somerset and on the Bristol Avon are deemed to be ‘uneconomic’. This is the term used when the calculated benefits of repairing the asset are not equal to the likely cost. Because in Wessex we have by far the highest number of uneconomic assets, we are left with a large failing asset base that we cannot replace nor repair because we can’t attract the funding. This often leads to us failing our BRC KPI.

Even when other funding streams become available, such as local levy, precept, Somerset Rivers Authority or other, we are often still limited in what we can do, as we need to use the staff we have to deliver higher cost benefit work that is deemed to be more of a priority.

Figure 9 below illustrates our current position and end of financial year forecast on BRC assets in relation to our target. It’s likely that Wessex would be the best performing area if uneconomic assets were removed from the data.

Figure 10: Wessex high priority assets BRC position November 2019



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Examples of assets below required target condition

Crossmoor pumping station. Mechanical elements of the gates at this site in North Somerset have failed. We have bid for asset recondition funding for this asset previously, but not been successful. Maintaining the function of the asset manually is currently costing c£4k/week in staff and fuel and a one off repair cost of c£28k will have to be paid. This is a good example of what we call 'sub-optimal' decision making in the asset management world, as the ongoing high maintenance costs mean we would have got better value for money had we intervened to recondition or replace the asset some years ago.

New Bow Sluice. The design of this asset and improvements to safe working practices meant that a close inspection could not be completed without specialist equipment. An enhanced inspection of this asset (funded by the increase in maintenance in SR16) revealed wear on hinge pins holding the gate up. We sought permission from the national office to add the cost of repairing this structure - and 2 others inspected using the same techniques - to the capital programme in-year. Work is now underway to repair these defects.



Figure 11: erosion of hinge pins and holes on New Bow sluice

## **Appendix 4 : Wessex revenue efficiency plan**

The following is an extract from the Wessex Area Revenue Efficiency Plan:

*As a condition of our 2014/15-2019/20 funding settlement, we were required to make a 10% efficiency saving in our FCRM revenue maintenance programmes by the end of this period. In parallel with this, the Worsfold Review recommended that the Environment Agency achieved a 15% revenue efficiency by 2020/21. According to these targets, areas have been set individual targets, pro rata to their annual revenue maintenance allocations.*

*These efficiencies are reported quarterly to Defra, the Infrastructure and Projects Authority and the Cabinet Office. Achieving these targets will help us deliver more for flood risk management and is critical to maintaining the confidence government have in our operational efficiency.*

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*We need to be able to describe the efficiency savings we make and provide appropriate evidence so these efficiencies can be transparently reported. All savings made will be re-invested back into revenue maintenance activities.*

*An efficiency is an action that:*

*i) Results in a reduction of the whole life cost of the FCRM project/activity/service compared to the baseline, and*

*ii) Provides the same or better output for the resources applied (so the efficiency can either be reducing input for the same output, or getting more output from the same input).*

*Stopping something or doing less of it and so saving money is not an efficiency.*

*A cumulative target has been set, which increases each year in order to meet the total target required by 2021. Efficiencies that are submitted in one year can also count towards the cumulative target if they apply to ongoing activities during the spending review period.*

Figure 12: The Environment Agency's revenue efficiency % targets and £ figures for Wessex.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
<b>SR15 target (%)</b>	10%					
<b>Worsfold target (%)</b>						15%
<b>Cumulative efficiency target (%)</b>	1.1%	3%	6%	9%	12%	15%
<b>Area target (£k)</b>	£65,000	£205,000	£380,000	£630,000	£898,560	£1,062,000
<b>Area current progress (£k)</b>	£46,176 (0.8%)	£74,436 (1.1%)	£385,000 (6.0%)	£660,000 (9.3%)	£726,000 (9.5%)	tbc

### Examples of revenue efficiencies in Wessex

1. Webcams were installed at sites that Flood Incident Duty Officers (FIDOs) often asked Field Teams to check either before or following heavy rainfall. By having live feeds from these sites, the number of unscheduled visits has reduced significantly.
2. Old diesel engines at pumping stations were replaced with electric engines. Not only are the new engines more efficient to operate and maintain, but they also allow us to demonstrate increased resilience to local people.



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*The picture is a night-time image from Minehead Town Screen in West Somerset. This site was a long way from the nearest depot, so would often take a trip of several hours just to check the screen.*

*These two pictures show one of the old diesel engines (top) and the new replacement electric engines (bottom) at Northmoor Pumping Station on the Somerset Levels.*

### Appendix 5: Wessex engagement programme

The Committee has previously supported the use of Local Levy funding for engagement. Using this funding, we have taken positive messages to communities across Wessex through Parish Council and other events and have also been working on innovative digital communications.

#### Why engage with people on maintenance?

- *“Lack of trust can lead to a lack of confidence in organisations. Trust can be gained by transparency in decision making, a collaborative approach, and involving people at the beginning of a process. Organisations that are genuinely open, accountable and inclusive, and make use of the distributed trust of their users and other stakeholders earn trust.” (Nesta, 2017).*
- In 2015, An audit by the National Audit Office led to a recommendation from the Public Accounts Committee that *“The Agency should be open and transparent with local communities and communicate clearly to them the consequences of the difficult decisions it has to make around prioritising maintenance, even allowing for the local pressure this may bring”.*



- Our internal social science report, March 2018, highlights the research evidence for maintaining and improving public trust through engagement. (Trust in the EA’s FCRM Work, 2018).
- Our new FCRM draft strategy states: *“Measure 3.2.2: By 2021 all risk management authorities will develop and use digital tools to better communicate flooding and coastal change. This will help achieve greater awareness and responsibility of the risks people face.”*



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What do we want to achieve?

Our vision of what we want to achieve is set out below.

*“A culture of positive engagement and open communication with both the public we serve and stakeholders we work with.*

*Communities, businesses, our staff and partners are able to more easily engage with the EA’s people and their activities through digital technologies.*

*We plan podcast content which is educational and informative, offering added value to our customers and partners. Building ‘peacetime’ relations and trust to facilitate messages and collaboration during high profile periods such as new scheme consultation or incident events.” (Chris Kumeta 2019)*

The table below in figure 15 gives a few examples of proactive engagement work we have done recently.

*Figure 15: proactive engagement examples*

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Location/ Asset/ Event	Overview of Work	Progress Status
<b>Taunton Garden Town Planning</b>	Providing maintenance engagement materials to Sam Dawe (Wessex EPE Manager) to share with Somerset West and Taunton Council; ensuring river maintenance is understood and considered by town planning.	Paper submitted. Sam Dawe to communicate ongoing progress and requests for asset/ maintenance detail inputs.
<b>Community scale GIS Story Map production for maintenance engagement</b> Priority communities; Taunton, Minehead, Bridport, Bristol, Bath, Bridgwater will be the first to be created.	GIS StoryMaps are being created to create a user friendly tool for sharing maintenance activities. An open platform for all to access. Improving on the non-user friendly maintenance schedules on .gov.uk. The online story maps provide an engaging interface to promote our work and raise understanding while also providing educational insights into local flood risk & history.	Ongoing- Story Map building underway; none yet published.
<b>Avonmouth Severnside Enterprise Area</b>	Supporting the project team to create digital engagement materials. Promoting the asset and maintenance of the asset management lifecycle as per ISO 55000 standards.	Ongoing- Consultation process completed. Engagement planned for each phase of development.
<b>Temporary Defence Deployment Plans</b>	Production of community briefing notes. Working with town and parish councils to raise awareness of temporary assets and arrange practice deployments. Internal engagement with P&SO, AP, Ops management and Field Teams leaders to build comprehensive & realistic plans.	Chipping Sodbury barrier test engagement complete. November flooding prevented a full practice deployment however engagement teams still spent the day talking to locals about the barriers and river maintenance; increasing awareness and support.
<b>Slaughterford Gate Decommissioning</b>	Working with the Ford Fly Fishers Club to hand over ownership, including future maintenance responsibility, of this un-economic asset.	Terms of handover agreed. The Ford Fly Fishers have submitted their plans (via Flowco contractor) to refurbish the asset prior to taking ownership.
<b>Somerset Prepared Community Resilience Day</b>	Asset and Maintenance promotion to 80 local community volunteers. Field team maintenance equipment on display and demonstrated at Junction 24 centre.	Day complete. Plans to hold the event again in October next year.

In addition to face-to-face engagement, we have also developed a series of podcasts about maintenance done in particular areas. This will help us make best use of technology available to us and reach the widest audience for the lowest cost.



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## Digital communications objectives

- **Accessibility.** Expert information is easily accessed by our communities and is captured for repeated use. For example; a podcast with AP or a field team on asset/river maintenance that explains the work we do and why.
- **Internal promotion and training tool.** Teams will be able to share work updates and engage with other teams on current or future projects more easily, without commitment to extra workload.
- **Community empowerment.** Listeners have the opportunity to ask questions back to the EA after listening via email, twitter, Facebook etc. Q&A recordings can be made to respond; this transparent dialogue will improve our customer relationships and highlight our cooperative nature.
- **Raised profiles.** Good news and success stories are easily shared, raising internal and external profiles of collaborative work, individuals and the EA along with our partners, as a whole.
- **Data storage.** Knowledge and insights from our current knowledge base will be captured and stored. Available to use on other platforms such as Duty role training or GIS Storymaps for example.
- **Collaboration.** Potential to produce collaborative podcasts with our external partners, for example, '*How the EA and Met Office collaborate*'.

Unfortunately, we have yet to get approval from Defra Communications to release any podcasts publicly.

# **Wessex Regional Flood and Coastal Committee Meeting**

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**ITEM 11 – National Paper – River Basin Management Plans and Flood Risk Management Plans (Challenges and Choices consultation)**  
**Paper for: Discussion**

**Paper by: Anne Dacey, Deputy Director, Integrated Water Planning, Environment and Business, Environment Agency**

**Subject: River Basin Management Plans and Flood Risk Management Plans – aligned engagement**

**Recommendations**

RFCC Chairs and Committee members are influential in working with partners to reduce flood risk. As part of the aligned engagement for shaping the River Basin Management Plans and Flood Risk Management Plans (RBMP and FRMPs) we are asking you to respond to the forthcoming Challenges and Choices consultation, and help shape the future approach to the management of the water environment.

The RFCC Committee is asked to:

1. Work with the Environment Agency and partners to promote discussions that identify where flood risk is reduced whilst concurrently improving the water environment.
2. Work with your organisations to complete a Challenges and Choices consultation response by 22 April 2020.

**1.0 Background**

- 1.1 River Basin Management Plans (RBMPs) were first produced in 2009 and are reviewed and updated every six years. As part of the review and update of the third cycle of the RBMPs, the Environment Agency are launching a consultation in October seeking everyone's views on the challenges our waters face and the choices we all need to make to improve or maintain this precious resource.
- 1.2 Challenges and Choices is the second of 3 statutory RBMP consultations. The responses will help shape the future approach to the management of the water environment and will be used to update the existing river basin management plans in December 2021.
- 1.3 We are working closely with FCERM colleagues to align engagement with the second cycle of Flood Risk Management Plans (FRMPs), which will also be published in December 2021.

**2.0 Water environment challenges**

- 2.1 Currently, only 16% of England's waters are close to their natural state. At the current rate of progress/investment it will take over 200 years to reach the Government's 25 Year Environment Plan ambition of 75% of waters close to their natural state.
- 2.2 The Challenges and Choices consultation will address the biggest challenges facing the water environment. It is an online consultation and will present each challenge as a specific page. Each challenge page will have a video, a brief overview with infographics and links to more detailed information on each challenge:

**ITEM 11 – National Paper – River Basin Management Plans and Flood Risk Management Plans (Challenges and Choices consultation)**  
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- climate and environment crisis
- changes to water levels and flows
- chemicals in the water environment
- invasive non-native species
- physical modifications
- plastics pollution
- pollution from abandoned mines
- pollution from agriculture and rural areas
- pollution from towns, cities and transport
- pollution from water industry wastewater

2.3 The Challenges and Choices consultation explains (or asks):

- why water is such a vital resource
- the current and future challenges that threaten the water environment
- how we can work together to manage our waters
- who should pay

2.4 By considering both flood risk issues and improvements to the water environment in our discussions, we increase opportunities to identify joint schemes, projects and ways of working which can bring overall time and cost efficiencies.

2.5 We would like you to encourage your networks to promote the Challenges and Choices consultation and seek stakeholder feedback. We would be happy to present at future RFCC committee meetings to give more local detail.

### **3.0 FRMP and RBMP consultations**

3.1 The RBMP Challenges and Choices consultation runs from 22 October 2019 to 22 April 2020. Next year, there will be a joint consultation on the draft FRMP and RBMP plans between October 2020 and April 2021.

### **4.0 Recommendations**

4.1 The RFCC Chairs are / RFCC Committee are asked to:

- Work with the Environment Agency and partners to promote discussions that identify where flood risk is reduced whilst concurrently improving the water environment.
- Work with your organisations to complete a Challenges and Choices consultation response by 22 April 2020.

**Authors: Suzanne Bennett, Senior Engagement Advisor, Strategic Catchment Partnerships, E&B and Dan Bean, Senior Officer, Operations Catchment Services**

**FRMP contact: Kylie Russell, Project Executive, Flood Risk Regulations and improving strategic planning**

**Sponsor: Anne Dacey, Deputy Director, Integrated Water Planning**

Date: 06 September 2019

ITEM 12 – Paper A – FCERM Update Paper  
Paper for: Information



## FCERM update paper

December 2019

### Incident management

#### November Flooding

Large parts of central and eastern England had twice the normal level of rainfall in October, with central parts of England receiving a month's worth of rainfall in the early part of November. The 7<sup>th</sup> November is the 7<sup>th</sup> wettest day on record in Sheffield (63.8mm of rain). The highest ever river levels were recorded on the Don at Doncaster and Derwent in Derby, exceeding 2007 flood levels in places. The peak at Evesham is the 5<sup>th</sup> highest in the 82 year record.

The most significant flooding impacts was seen along the River Don in South Yorkshire. The main areas that flooded in South Yorkshire were Fishlake and Bentley and Worksop in Nottinghamshire. 7 Severe flood warnings (covering some 400 properties) were in force to communicate 'risk to life' along the River Don near Doncaster. Around 22,000 properties and businesses have been protected by flood defences across the impacted areas and approximately 1,000 properties have flooded during the event, mostly in South Yorkshire.

Catchments across much of England are absolutely saturated and are very sensitive to rainfall and will mean flood risk is higher and it will take a lot less rain than it ordinarily would at this point in the year to result in flood warnings.

#### The future of flood warning? Cell Broadcast Trials

We are trialling the use of cell broadcasting technology and its potential for alerting people to the risk of flooding. Cell broadcasting is a way of transmitting a message to all mobile phones within a geographic location. It is not currently used in the UK but has been adopted by many countries internationally as a preferred alerting platform. These countries include the USA, Netherlands, Canada, New Zealand, South Korea and Japan amongst others.

Cell broadcasts can be received even when mobile phone signal is poor or from a different operator. They are designed to reach as many people as possible in the affected area, meaning that we can target those who need it, when they need it most.

The first of these trials will take place in Hull, in partnership with Fujitsu, EE and the University of Hull, on the 26 November 2019. Depending on the findings of the initial trial, a public trial is planned for 2020 in Hull city centre on the EE 4G network, with further trials on other mobile networks likely in 2020.

To help us understand how a cell broadcast would be received and what action someone might take, we'd like to invite Chairs and Committee members to respond to our pre-trial questionnaire: [https://docs.google.com/forms/d/e/1FAIpQLSdB\\_2Bj1uBBCqPr4EtdVPJqe7S9MzE249yiqIwvGejxmLZNsA/viewform](https://docs.google.com/forms/d/e/1FAIpQLSdB_2Bj1uBBCqPr4EtdVPJqe7S9MzE249yiqIwvGejxmLZNsA/viewform)

If you are interested in this initiative, please email us on [mobile-alerting@environment-agency.gov.uk](mailto:mobile-alerting@environment-agency.gov.uk). You can also follow us on twitter on @FloodDigitalEA.



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### Flood Risk Mapping and our ‘knowledge services’

We have two flood mapping services:

1. Long Term Flood Risk Information (LTFRI) provides the public with flood risk information for locations in England <https://flood-warning-information.service.gov.uk/long-term-flood-risk/>. It includes risk from rivers, the sea, surface water reservoirs and groundwater and is our primary channel for communicating flood risk from all sources. It has 400,000 users completing 1 million visits a year. We are currently improving the way that local surface water risk is communicated so that it is better presented and more easily understood.

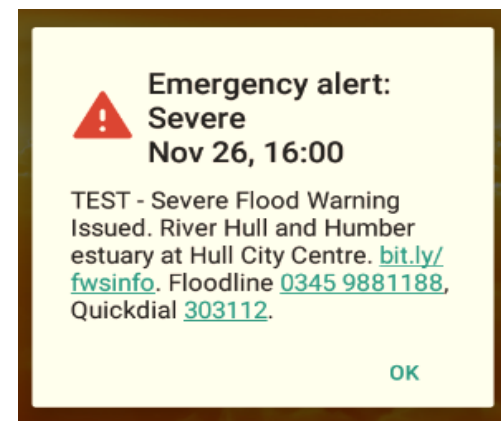
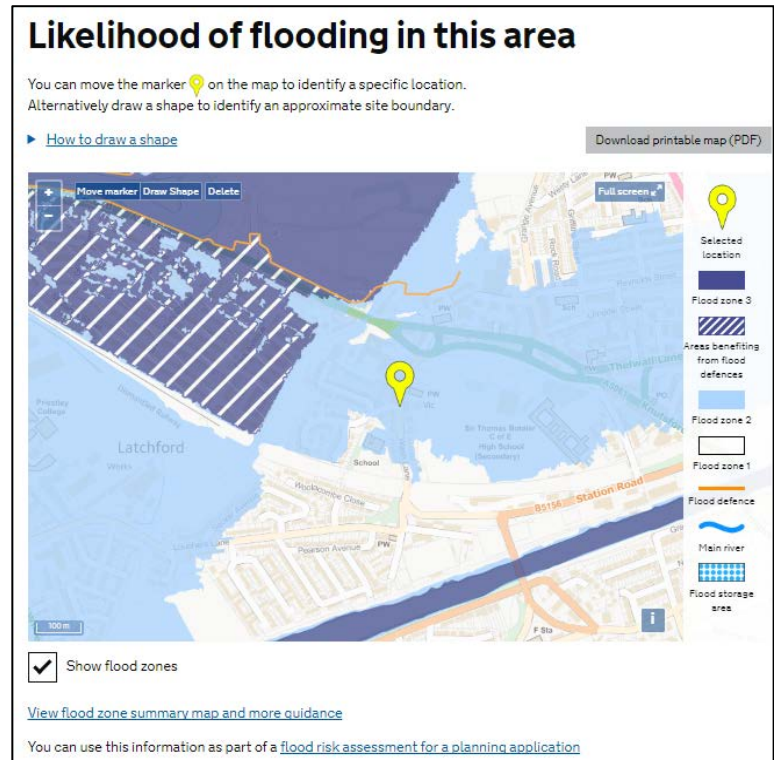
2. Flood Map for Planning is a service for developers, and their consultants, to check the flood risk of potential development sites <https://flood-map-for-planning.service.gov.uk/>. With 420,000 users completing 800,000 visits a year, we are currently working to improve this service by automating the provision of all data required for a flood risk assessment.

This will provide information to customers faster, without compromising quality and significantly reduce demands on staff time.

### Flood Warnings and our ‘Live services’

The Flood Information Service <https://flood-warning-information.service.gov.uk/warnings> is the home of our flood warning pages online as well as information on river and sea levels and the five day forecast. We have recently added 30 more flood forecast sites to our river levels online pages.

In addition to continuing the great partnership work with Google to share our flood warnings through Google public alerts (reported in the Sept RFCC stakeholder update), further important work has been ongoing to develop our cell broadcasting capability (see above).



## Planning for the future

### Flood and Coastal Erosion Risk Management Strategy

Following the public consultation on the draft FCERM Strategy, we are in the process of finalising the strategy taking on board the extensive stakeholder feedback we received. We received over 400 consultation responses and there has been significant support for three ambitions of the draft Strategy: climate resilient places; today's growth and infrastructure – resilient to tomorrow's climate; and a nation of climate champions. We are very grateful for all the feedback and support we have received. The work to deliver the ambitions within the strategy remains our focus.

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We will be seeking to finalise the strategy for approval by the new Secretary of State in the New Year. As a statutory document, the strategy needs to be laid in Parliament for 40 days and so we are now aiming to publish the strategy in spring 2020.

### **Flood and Coast Conference 2020**

We are pleased to announce that The 2020 Flood and Coast Conference will take place from 2-4 June 2020 at the Telford International Centre. The event will be developed and delivered in partnership between the Environment Agency and CIWEM, who have recently acquired the Intellectual Property Rights from TRIO events.

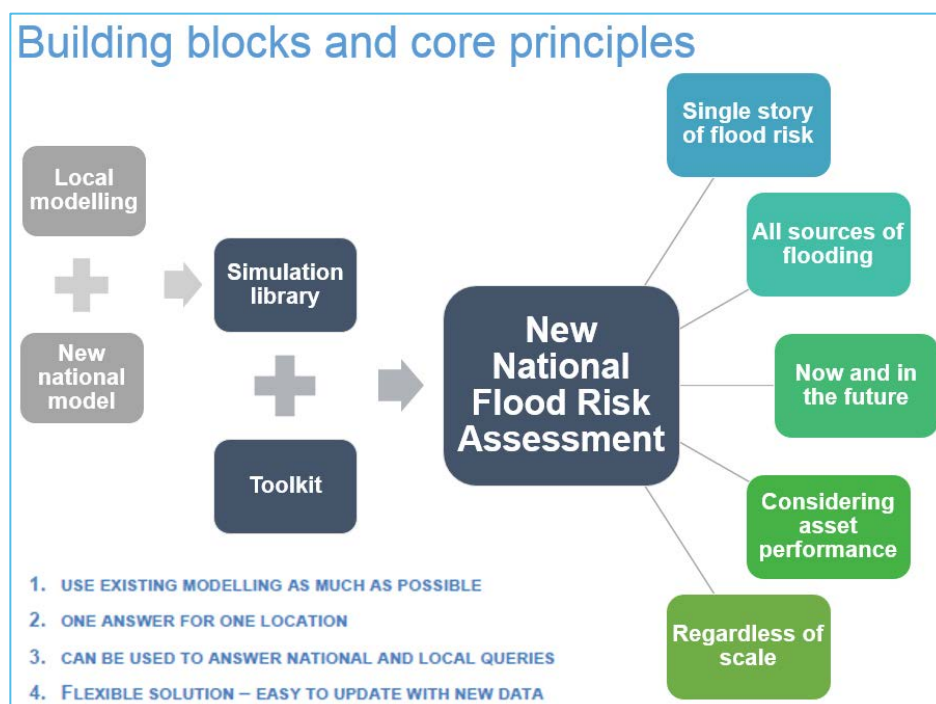
We are really excited that this year's conference will not only focus on flood and coastal issues, but will also have a greater focus on Climate Change, linking in to the aspirations of CoP26 conference taking place in November 2020. The event will draw together key partners from the flood and coastal risk management community, including local authorities, internal drainage boards, contractors and suppliers, community groups and academia.

The project board have invited key professionals across the Flood and Climate Change sector to form our Advisory Committee and we look forward to welcoming Martin Hurst to help in the design of the conference programme. All RFCC Chairs and members are requested to book these dates in their diary and are strongly encouraged to attend.

Building on our previous success, we are currently working on an exciting programme for 2020. We would like to invite RFCC members to get involved by suggesting stimulating discussion topics, interactive displays, facilitated workshops as well as lively presentations which will form part of that programme. If you are aware of any projects that have delivered excellent results or have found a new or improved way of working that you would like to highlight, please let the team know by contacting: [floodandcoast@environment-agency.gov.uk](mailto:floodandcoast@environment-agency.gov.uk)

### **New National Flood Risk Assessment**

Our National Flood Risk Assessment is changing. Our current assessment only considers flooding from rivers and the sea. In future, we will draw upon a wider range of flood risk information from a variety of sources to inform our New National Flood Risk Assessment, available in 2024.



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It is essential that we engage and involve our stakeholders at all stages of the project. We are currently seeking to establish an External User Advisory Group to help shape, review and test the products. We'd like to have this group set up before April 2020.

We would like to invite you and your committee members to participate in this group. This is a key opportunity to help us produce improved flood risk information for the public and create a shared understanding of flood risk across our organisations. Lead Local Flood Authorities' involvement is particularly important. To receive updates or join the group, please send your details to [FCRM\\_Risk\\_Assessment@environment-agency.gov.uk](mailto:FCRM_Risk_Assessment@environment-agency.gov.uk)

**Flood risk and hazard maps publication**

The flood risk regulations (FRR) require the Environment Agency and lead local flood authorities (LLFAs) to produce flood risk and hazard maps and review them every six years. Our first flood risk and hazard maps were published in 2013. We must review, update and publish second cycle maps by 22 December 2019.

Flood risk and hazard maps must be produced to reflect the different sources in the flood risk areas (FRAs) which were identified using the methodology we agreed when we undertook the [preliminary flood risk assessment](#). Having consulted with LLFAs to gain agreement, we will prepare all the necessary maps on behalf of both the Environment Agency and LLFAs. This will provide consistency across the country and reduce the burden for LLFAs.

The maps are published on gov.uk in order to meet our requirements under the FRR and they are used to inform the production of [flood risk management plans](#). The [flood risk maps](#) show what is at risk of flooding such as people, property, economic activity and natural and historic areas of environmental importance. The flood risk maps use static data from a snapshot in time in order to report to the EU are not intended for use by the public and other stakeholders. The flood hazard map requirement is covered by our '[long term flood risk assessment for locations in England](#)'.

**Contact:** [kylie.russell@environment-agency.gov.uk](mailto:kylie.russell@environment-agency.gov.uk)

**Improving our data: Conceptual Data Model for FCRM**

Comprehensive, useable and reliable data underpins the Environment Agency's ability to operate and is key to the success of the FCERM Strategy, our digital services and the 25 Year Environment Plan. Data is the vital hidden asset we need to look after to help us provide a better service as well as maintain the trust of customers and partners. We want to embed digital services and good data management as a core part of our structures, culture and skills.

To help do this we are creating a conceptual data model which will be used to improve how we create, maintain and use data across flood and coastal risk management. Creating and maintaining data models means we can see the whole picture on data across flood activities and understand the impacts of any changes to the data, actions we take and who will be impacted. We can identify any potential clashes of understanding, terminology, relationships and dependencies both within the FCRM business and potentially with other parts of the Environment Agency. We can then use this knowledge to identify what could be done better.

The Mapping, Modelling and Data Leadership Group, will be using the data model as a reference in its new role as the FCRM Data Governance Council (DGC). We'll make sure that new projects adhere to the data model, helping Project Executives and Data Custodians to make the right strategic decisions for all stakeholders based on their data needs.

**Contact:** [nick.keen@environment-agency.gov.uk](mailto:nick.keen@environment-agency.gov.uk)

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### **Property flood resilience**

A new British Standard for property flood resilience (PFR) products was published on 24 September 2019. It replaces PAS1188:2014 Parts 1 to 4, which will now be withdrawn. It sets standards for the laboratory testing of the leakage rate of PFR products. Part 1 of the new standard covers products for buildings and Part 2 covers perimeter systems, which includes temporary barriers and demountable systems. Engineers from Defra and the Environment Agency provided technical expertise as members of the drafting committee for the British Standard.

Manufacturers testing new products will use the new standard. Manufacturers with existing PAS1188 tested products will have an interim period to test products and ensure they comply with the new standard.

A new Code of Practice (CIRIA RP1055) will explain the assessment, design, installation, aftercare and operation of PFR products and is due to be published shortly.

**Contact:** [phil.foxley@environment-agency.gov.uk](mailto:phil.foxley@environment-agency.gov.uk) or [Robbie.Craig@defra.gsi.gov.uk](mailto:Robbie.Craig@defra.gsi.gov.uk)

### **World Class Asset Management**

The Asset information Management System (AIMS) Upgrade project will put in place a comprehensive enterprise asset management (EAM) system and central asset data repository for the Environment Agency. It is an important step in our goal of becoming world class asset managers. It will replace existing systems, improve the way we manage Environment Agency maintained assets, and improve our ability to share data with other Risk Management Authorities.

AMX Solutions is the recently appointed supplier of the new system; they already provide similar systems to Natural Resources Wales (NRW) and other major infrastructure organisations. Work is now progressing to configure the new systems, develop new ways of working and prepare data for transfer. We are also collaborating with NRW and other users of the AMX solution to identify common objectives and features.

In May 2021, AIMS: Operations & Maintenance (AIMS: OM), will replace the many existing flood and coastal risk management systems with a single application and consolidated data repository. The system will be rolled out to the Environment Agency's Environment & Business (E&B) directorate in April 2022.

Once in production, we will have ownership of the system's functionality and underlying data, meaning we will be able to control over how the system evolves and expands in the future.

**Contact:** [Craig.McAdie@environment-agency.gov.uk](mailto:Craig.McAdie@environment-agency.gov.uk)

### **Flood risk activity permitting**

#### **Multi-site permits**

In our ambition to be a fair regulator offering value for money we have developed a multi-site permit for flood risk activities. Multi-site permits allow for a number of activities to be held on one permit and offers greater flexibility while still managing flood and environmental risks.

The Environmental Permitting (England and Wales) Regulations 2016 (EPR) enables groups or individuals to apply for one bespoke permit to cover a large area perhaps for 5-10 years. We have used this principle in Alt Crossens (Lancashire) to enable a group of around 15 landowners to undertake a significant amount of channel maintenance (previously undertaken by the Environment Agency).

This multi-site permit has been a great success. The main outcomes include:

- Cheaper permits as costs can be shared
- Proportionate risk based regulation



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- Maintenance for a substantial area co-ordinated by a group of landowners meaning better environmental outcomes as well as land drainage benefit.
- Improved delivery. We can programme Environment Agency work to complement the work of landowners in a co-ordinated way
- Stronger local partnerships

**Contact:** [joe.march@environment-agency.gov.uk](mailto:joe.march@environment-agency.gov.uk)

### **Sharing best practice with Scottish Environmental Protection Agency**

As part of our regulatory work we continue to look at ways to improve the service. Last month we visited the Scottish Environmental Protection Agency (SEPA) to understand how their regulations apply in practice for river activities. We also exchanged ideas on working practices that would enable a better experience for our customers.

**Contact:** [john.austin@environment-agency.gov.uk](mailto:john.austin@environment-agency.gov.uk)

## **Working with others**

### **De-maining pilots (testing approaches to transferring watercourses and assets)**

The de-maining pilots are now complete. From the initial 5 pilots, we have been successful in transferring watercourses, land and assets in 3 of the pilot locations: South Forty Foot in Lincolnshire, River Stour in Kent and the Snow Sewer on the Isle of Axholme. The 3 pilots resulted in the re-designation of 63.8 km of main river, and the transfer of 28 assets and 178 acres of land to Internal Drainage Boards. There were a number of watercourses that we did not de-main during the pilot because the proposals were either not supported locally, or where action by partners was needed that did not meet the pilot timescales.

The pilots have provided valuable learning, including the importance of strong functioning local relationships, clear lines of communication and ways of working, a local strategy for long term maintenance, and the need to streamline and make the process of de-mainment less resource intensive.

We are writing up a full evaluation of the pilots, which we will share with pilot partners, Association of Drainage Authorities, Local Authorities through the Local Government Association (LGA) and RFCCs.

**Contact:** [rachael.hill@environment-agency.gov.uk](mailto:rachael.hill@environment-agency.gov.uk)

### **Apprenticeships**

The Water Environment Worker Apprenticeship Standard has now been approved for delivery by the Institute for Apprenticeships and Technical Education. We appointed Bridgwater and Taunton College to deliver the apprenticeship on our behalf. Our first 120 apprentices in Field Operations teams are in the process of being enrolled. You can find more information here: <https://www.instituteofapprenticeships.org/apprenticeship-standards/water-environment-worker/>

We are planning to recruit our first intake of 20 young, career entry-level apprentices. They will start with us in September 2020. These will be mainly science and engineering degree-level apprenticeships, targeting A-level and college students in the main. The posts will have a structured training programme in the form of an apprenticeship, supplemented by technical learning. This is part of work to diversify our 'grow-your-own' skills initiatives, which currently includes the Graduate Training Scheme for civil, mechanical and electrical engineering graduates, as well as the Flood and Coastal Engineering programme with Brunel University and also the Quest Scholarship programme with the Institute for Civil Engineers. All of these are important channels to draw in young, promising talent into the flood sector and into our workforce.

Looking ahead, we intend to put in place a specific apprenticeship programme to take advantage of the new Environment Practitioner Degree-level (BSc) Apprenticeship Standard. The aim is for 40 new starters in September 2021.

**Contact:** [colin.berghouse@environment-agency.gov.uk](mailto:colin.berghouse@environment-agency.gov.uk)

**ITEM 12 – Paper A – FCERM Update Paper**  
**Paper for: Information**

**Education to Profession: Engaging with Children and Young People**

In step with our draft FCERM Strategy, we have actively engaged thousands of children and young people over the past 6-9 months, through a structured approach we call the '3C's of STEM engagement'. These are Curriculum, Career and Conversation. Recent highlights include:

Curriculum - On the 7 October, we launched a range of geography resources at the PiXL conference, which will be available to around 2000 schools and colleges in the network.

Careers - We attended New Scientist Live and Careers Live where we spoke to hundreds of young people about potential careers in the environment and flood sector and explained the range of jobs we do in the Environment Agency, from flood risk management to nuclear industry regulation. We gave out literature on apprenticeship opportunities, the Flood and Coastal Engineering Degree Programme and promoted the Environment Agency as a career choice for young people who want to make a difference and tackle the climate emergency.

Conversation – Across the Environment Agency, staff are engaging with children and young people in schools and on-site visits, having conversations about our work in flood risk management. We are equipping staff with materials and training staff to deliver meaningful and captivating conversations with young people on environmental issues.

**And finally...**

We have a number of initiatives in the pipeline including a 'Climate Champions' competition for primary school aged children. We released an Engineering Project that we wrote for Level 2 students. Ayo Sokale, one of our Graduate Engineers did a live read (<https://learnliveuk.com/>) to schools and colleges around the country (and possibly the world) of 'Alba the 100 Year Old Fish' by on 6 November. We are told the live online audience was over a thousand children from 40+ schools in the UK, with many more likely to listen to the recorded story in the weeks ahead.

**Contact:** [colin.berghouse@environment-agency.gov.uk](mailto:colin.berghouse@environment-agency.gov.uk)

<b>ITEM 12 – Paper B – ADA RFCC Membership</b> <b>Paper for: Information</b>
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## Representing Drainage Water Level & Flood Risk Management Authorities

Rural Innovation Centre, Avenue H,  
Stoneleigh Park, Warwickshire, CV8 2LG  
Telephone: +44 (0) 2476 992889  
Email: [admin@ada.org.uk](mailto:admin@ada.org.uk)  
Website: [www.ada.org.uk](http://www.ada.org.uk)  
Twitter: @ada\_updates

To: [jenkins@bucklersbid.co.uk](mailto:jenkins@bucklersbid.co.uk)

by e-mail

19 December 2020

Dear David,

### **ADA RFCC Membership 2020**

Once again water level management is directly under the spotlight. We have witnessed the devastating effects of flooding following intense rainfall in many parts of the country in recent months. Not only to homes, but also to businesses, infrastructure, valuably productive farmland, and our environment.

Thank you for your RFCC's membership of ADA over the past 12 months. Your support enables us to continue to work with, and campaign for, those public-facing partners who are on the front line during such events. Our job is to help articulate your ideas, needs, and concerns to ensure that water level management remains high on the policy-making agenda. In this fresh political environment, we are very well placed in parallel with you to deliver those messages quickly and clearly. At the same time we work hard to build stronger links between our members, helping you to work together, strengthening your local resilience against future climate challenges, and delivering better outcomes for the public.

During 2019 ADA has been:

- Lobbying for better funding outcomes for local flood risk management ([FCERM Partnership Funding](#))
- Raising the profile of surface water management ([Collaborating with Association of SuDS Authorities](#))
- Strengthening partnership working ([Public Sector Cooperation Agreements](#))
- Supporting local determination for watercourse management ([Rationalising the Main River Network](#))
- Improving the governance and transparency of internal drainage boards ([Good Governance Guide](#))
- Responding to important national consultations ([draft National FCERM Strategy for England](#))
- Assisting our members' collaboration around water resources planning ([Water Resources East](#))
- Contributing to research into river obstructions to European eels ([University of Hull REDEEM Project](#))
- Articulating the key policy outcomes from recent flood events ([ADA General Election 7 Point Plan](#))
- Developing metrics and guidance to enhance the lowland water environment ([biodiversity guides](#))
- Expanding our in house technical expertise ([New Technical Officer, Sofi Lloyd](#))
- Strengthening our engagement with international networks ([ADA's Presidency 2019-20 of EUWMA](#)).



**ITEM 13 – Paper B – River Basin Management Plans and Flood Risk  
Management Plans – aligned engagement  
Paper for: Information**

RFCCs are integral to the effective planning and delivery of good water management in England and Wales. We would very much welcome your RFCC's continued support during the next 12 months in order to build on our recent work (see our plan for 2020 overleaf).

Thank you again for being a member of ADA, we look forward to working alongside you in these challenging and exciting times ahead. Please do encourage all RFCC members who are interested in water management to get in touch in order to receive updates from ADA including our monthly electronic newsletter and quarterly membership magazine, the ADA Gazette.

With best seasonal wishes,

A handwritten signature in black ink, appearing to read 'Innes Thomson', with a horizontal line drawn underneath.

Innes Thomson, Chief Executive, ADA

**ITEM 13 – Paper B – River Basin Management Plans and Flood Risk  
Management Plans – aligned engagement  
Paper for: Information**



## Representing Drainage Water Level & Flood Risk Management Authorities

Rural Innovation Centre, Avenue H,  
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Twitter: @ada\_updates

### Outline Plan for ADA actions in 2020

Below are brief details of what you can expect from us in 2020:

- 1. Increase our political presence** through meetings and events in Westminster, alongside MP briefing notes, consultation responses, and position statements.
- 2. Enhance environmental governance** with a new Environment and Biodiversity Support Guide for risk management authorities (Defra funded) and new guidance for updating IDB Biodiversity Action Plans.
- 3. Promote safer working practices** with guidance, workshops and links relating to health, safety and welfare for our members, building on our recent HS&W survey.
- 4. Develop educational resources** for 11 to 14 year olds to stimulate their thinking about the lowland water environment and career opportunities in water and flood management.
- 5. Publish guidance on engaging with developers** related to flood management features and financial contributions.
- 6. Utilise GIS (Geographical Information Systems)** to better articulate the benefits and purpose of our members and flood and water level management.
- 7. Work towards a common understanding of resilience standards** alongside the Environment Agency and other risk management authorities for the new National FCERM Strategy for England.
- 8. Forge stronger partnerships in rural and farming communities** through knowledge exchange events such as soil health workshops to ensure the new Environment Land Management Scheme covers flood risk reduction as a public good.
- 9. Contribute to policy development** particularly around FCERM funding, controlled flood storage, sustainable drainage, resilient infrastructure and embankments, asset transfer, and IDB ratings reform with Defra, MHCLG and other government departments.
- 10. Provide a platform to share knowledge and innovation** through events such as FLOODDEX 2020 at the Peterborough Arena on the 26 and 27 February and at our Annual Conference in Westminster in November.

[ADA – representing drainage, water level and flood risk management authorities](#)

Member of EUWMA- the European Union of Water Management Associations  
ADA is a Company Limited by Guarantee. Registered in England

# Wessex Regional Flood and Coastal Committee Meeting

14 January 2020

## ITEM 13 – Minutes of Previous Wessex RFCC Meeting Paper for: Information

### Wessex Regional Flood and Coastal Committee

*Minutes of Meeting: Tuesday 15<sup>th</sup> October 2019*

Venue: Frogmary Green Farm, West Street, South Petherton, Somerset TA13 5DJ

<b>Present:</b>	David Jenkins Rosie Dilke Peter Finney MBE Anne Fraser MBE John Harris David Martin Cllr Neil Butters Cllr Felicity Rice Cllr Mark Roberts Cllr Jan Warwick Cllr Bridget Petty Cllr David Hall Cllr Brian Hopkinson Cllr Mike Hewitt	Chairman EA Appointed Member – General Interests EA Appointed Member – General Interests EA Appointed Member – General Interests EA Appointed Member – Inland Flooding EA Appointed Member – Water and Utilities Bath and North East Somerset Council (Deputy) Bournemouth Christchurch and Poole Council Dorset Council Hampshire County Council North Somerset Council Somerset County Council South Gloucestershire Council (Deputy) Wiltshire Council
<b>In attendance:</b>	Robert Gould Emma Baker Ron Curtis  Rachel Burden  Andrew Gill Charissa Crabbe Roger Burge Matt Hosey	Environment Agency Board Member Environment Agency, Area Director Wessex Environment Agency, Area Flood and Coastal Risk Manager Wessex (East) Environment Agency, Area Flood and Coastal Risk Manager Wessex (West) Environment Agency, Programme Team Leader Environment Agency, Programme Advisor IDB – Somerset Drainage Boards Consortium Bournemouth, Christchurch and Poole Council and also representing the Southern Coastal Group
<b>Secretariat:</b>	Stacie Bristow	Environment Agency
<b>Apologies:</b>	Anthony Bradford Helen Mann Janette Ward Cllr Phillip Awford	EA Appointed Member – General Interests EA Appointed Member – Coastal Processes EA Appointed Member – Conservation Gloucestershire County Council

### 56/19 Welcome, Introductions and Apologies (agenda items 1 and 2)

The Chair welcomed everyone to the meeting, particularly welcoming Robert Gould, Environment Agency Board Member. The Chair also welcomed to their first Committee meeting the two newly appointed members: Cllr Jan Warwick representing Hampshire County Council, and Cllr Bridget Petty representing North Somerset Council; and Cllr Brian Hopkinson acting as deputy for South Gloucestershire Council.

Apologies were noted.

### 57/19 Declarations of Interest (agenda item 3)

The following standing declarations of interest were noted:

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As members or deputy members of the board of the SRA:  
David Jenkins, Anne Fraser, John Harris, and Cllr David Hall

David Jenkins	Board of ADA
Cllr David Hall	Chair of the SRA
Rosie Dilke	Substantive employment is with Dorset Council

The Chair informed members that the Environment Agency's annual refresh of Committee member information is underway, and the Secretariat has provided templates for contact information and declarations of interest forms. **Action: All to return completed forms** to the Secretariat as soon as possible.

#### 58/19 Chair's Update (agenda item 4)

The Chair gave an oral update.

In early July, DEFRA had issued a call for evidence to inform government policy on flooding and coastal erosion. The time allowed for response was quite short – with a deadline of 19<sup>th</sup> August. A response was sent on behalf of the committee, which was copied to all members on 22<sup>nd</sup> August. Included in the response were some of the issues that have arisen in Committee meetings and through Wessex schemes, and the Chair thanked the EA officers who contributed to it. As of the time of this meeting, there have been no comments or feedback received on our response.

Theresa Villiers was appointed Secretary of State for Environment, Flood and Rural Affairs on 24<sup>th</sup> July 2019, and Rebecca Pow was appointed Parliamentary Under Secretary of State at Defra on 10<sup>th</sup> September 2019. Rebecca has served as the MP for Taunton Deane since 2015. Emma Baker met the new minister and briefed her on some Wessex issues, and Emma confirmed that Rebecca has expressed interest in Wessex and Somerset.

David Warburton's private member's bill on flooding and land drainage, which would have prepared the way for putting the Somerset Rivers Authority partnership on to a statutory footing has failed. The new minister has expressed an interest in incorporating the bill's provisions into other legislation when an opportunity rises.

On 31<sup>st</sup> July, the Wessex and South West RFCC Chairs attended meetings and site visits in Somerset, arranged for officials from Defra and the Treasury. The object was to inform them of flood and coastal risk management spending needs for the purposes of the forthcoming public spending review. It was a successful day, and illustrated the point that national funding formulae and public expectations are not currently aligned.

RFCC Chairs met in London on 27<sup>th</sup> September. Much of the business overlapped with that on our agenda today – aftermath of the Toddbrook reservoir incident, capital programme for 2020/21, next steps for the EA's FCERM strategy, and priorities for coastal monitoring programmes.

Please note that the Anglian (Central) Regional Flood and Coastal Committee has changed its name to the Anglian (Great Ouse) Regional Flood and Coastal Committee. This change must apparently be reported to the other RFCCs in order for it to become lawful.

The Chair also attended two meetings of the EA Asset Management Group (where there was significant discussion of the consequences for capital schemes of the EA Board's decision to go for a net carbon zero approach), an event to mark the start of the main contract for the Avonmouth and Severnside Flood Defence Project, South West Flood Risk Managers meeting, and the South West Coastal Group.

The Chair gave an update about the review of surface water flooding law and practice that Defra have asked him to lead. This review has been slow to get under way, but terms of reference and support arrangements have now been put in place. Thank you to Hampshire County Council for offering support. All lead local flood authorities in England will be contacted about the review, and Matt Boon from the Environment Agency has arranged a meeting of the flood risk managers of all Wessex Lead Local Flood Authorities, in order to gain

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practitioners' practical experiences and views. **Action: All** to discuss with your Technical Officers. David Martin asked if Water Companies can be involved; Ron Curtis will speak to David Martin separately about this (Wessex Water has been represented at a previous meeting).

**59/19 Area Director's Report** (agenda item 5)

Emma Baker, Wessex Area Director, gave an oral update.

It has been a busy few months in Wessex.

The EA Board met last week, and unanimously declared that the Environment Agency will aim to become a carbon net zero organisation by 2030, and explore whether the Environment Agency can become an absolute zero organisation by 2050. **Action: Emma Baker and Robert Gould** will present an update to this committee at a future meeting in the coming year. This announcement generated various discussion points, which included: the impact this will have on how schemes are developed and evaluated, accountancy, engineering, and accountability. Robert Gould attended the EA Board Meeting; achieving absolute net zero by 2050 will be really challenging and it's difficult at the moment to envisage how this will be achieved, but the Board has real optimism that we can do it.

The EA is well on the way to achieving the 300k houses target; we are also planning for the next investment period and hope to learn more by the middle of November. Post meeting note: as a result of the general election, we won't now hear about the future funding settlement until the new year.

A query was raised about climate change – will this affect any of the projects we have planned? Ron Curtis confirmed that anything up to March 2021 will be part of the current funding rules; the new rules will apply to projects from April 2021 onwards. The EA does already consider the carbon footprint of current schemes, and this is likely to become a much bigger part of the Committee's work.

Emma Baker stated that we cannot underestimate how much thinking needs to go into this; a lot of work needs to be done on this both nationally and locally. At the moment, we don't actually have the answers of how we're going to achieve the net zero ambitions by 2030 and 2050.

The EA's FCERM Strategy is looking more at resilience, rather than protection; this applies to both businesses and residential properties. The comparison was raised about countries where earthquakes occur; how is flooding different? The group discussed building regulations, and questioned whether houses can be made waterproof when building them. The issue of building houses in flood areas comes up regularly; this has been fed back via the Committee's response to the Strategy consultation. A concern was raised that the various government departments are not actually communicating with each other, and that it is hard to meet targets.

**60/19 Area Flood and Coastal Risk Manager (AFCRM) Report on current issues** (agenda item 6)

Rachel Burden and Ron Curtis presented the information paper, AFCRM Report on Current Issues.

Rachel Burden gave an update on the EA's recent operational response – 40mm of rain fell over the weekend, mostly over south and southeast Somerset. Several Flood Alerts were issued: on the River Chew, in Bristol, and on the Brue. At Twerton Gate, the radial gate gearbox failed, and we have increased our resources to manage the situation there and maintain river levels.

Since the last Committee Meeting in July, we have been busy with 'hot weather' incidents including pollution, waste fires, and fish kills (including a major pollution incident on the River Sheppey which resulted in a large number of fish killed). We have also spent a considerable amount of time and resources in preparing and planning for EU Exit.

The project team leading the National FCERM Strategy Consultation confirmed that they received 400 external responses, and 88 internal EA responses. The project team will consider the consultation responses and present the Strategy to parliament later this year, with the aim to publish it in spring 2020.

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Some progress has been made on the Bridgwater Tidal Barrier (BTB) scheme. The EA has met with Chilton Trinity Parish Council and local residents to discuss proposals for further ground investigations this autumn/winter, and the EA is looking forward to the exciting opportunity of working with the Wildfowl and Wetland Trust to enhance the area and deliver wider environmental benefits alongside the barrier scheme.

The EA has carried out additional inspections on the 21 reservoirs within Wessex area. Minor defects were identified, and have been corrected or put into the programme of work; all are fully compliant and working safely.

Comments and questions were welcomed.

A concern was raised about the indicative visualisation of the Bridgwater Tidal Barrier (as shown on page 9 of the papers) regarding the grass; grass cutting is very expensive, there are other plants and options available and the request is for the EA to consider other options as well as grass. Rachel confirmed that the EA is looking at the maintenance, and that's part of the reason we're working in partnership with the Wildfowl and Wetland Trust.

Questions were raised about Pulteney and Twerton Gate. How often would you anticipate this sort of failure? What is the situation now with the radial gate in the centre of Bath? Is it still operational to a degree? Ron confirmed that for Pulteney the EA is still working with BANES and Bath Rugby; the gate is operational and still working, but provides very little flood risk benefit and justifying Flood Defence Grant in Aid (FDGiA) expenditure on this asset is difficult. The EA is looking at moving away from the gate, but we're not quite there in terms of a solution yet.

Regarding Twerton, the replacement of this structure is in our programme at the moment, and was originally due to deliver in the next 2 years, however this project will now be phased over 3 years due to some safety and access issues and uncertainty around total cost. It was decided that it would be better to go more slowly; now that the gear box has failed, we will look at this again and may decide to accelerate this scheme. In the short term the gear box will be replaced, although this will take up to 3 months.

The Committee:

**Noted the news and updates.**

#### **61/19 Finance: 2019/20 In-Year Update (for decision)** (agenda item 7)

Andrew Gill presented the paper and went through the presentation for 2019/20 finance update.

Our phasing of delivery in the last 2 years of the programme has changed since the beginning of the financial year, we will now be delivering a few less OM2's in 2019/20, but more in 2020/21. The key message is that we are on track to better protect 16,177 homes by March 2021.

The OM2 target for 2019/20 is 952, we are currently forecasting 582; the majority of the 370 decrease is due to projects now being delivered in 2020/21, including Cerne Abbas Reservoir (220 OM2's), Wessex PLP (96), and Summer Lane (93). The Hamworthy and Upton scheme has been pushed back in the programme to 2025 due to the complexity associated with multiple sources of flooding and the availability of Partnership funding prior to 2021. We have asked the national programme office for a change of target.

The OM3 target is 40, and current forecast is 80. This increase is due to the Weymouth Bay BMP and Works project (26), and West Bay Coastal Improvements delivering an additional 14 OM3's.

The Local Levy target is £7.3m, and current forecast is £5.1m. The £2.2m reduction is mainly down to an opportunity to pay back the £1.2m Levy Loan for West Bay this year rather than next year; this money has come back into the balances and can be used for other projects. We have also had some slippage in the

# Wessex Regional Flood and Coastal Committee Meeting

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programme, due to Wessex PLP, where £492k has been pushed back in the programme due to delays in setting up the new Procurement Framework.

FDGiA Revenue target is £12.9m, and current forecast is £13.7m. An element of this potential £724k overspend is due to overprogramming; we will manage this back over the remainder of the year in order to hit our target.

LA/IDB FDGiA Capital is currently showing an £813k overprogramme; this is mostly down to the Weymouth Harbour Phase 1a project (Weymouth wall repair), which was supposed to deliver last financial year and got pushed back and will deliver this year now.

EA FDGiA Capital is currently within £122k of our target. Wessex is in a really good place with regards to forecast and budget.

Our top 10 projects are responsible for delivering 91% of the total OM's target for this year and next year, and we will only achieve this if we all work together. The Chair stated that the point is regularly made to RFCC Chairs about the vital importance of spending the money now in this 6 year programme. **Action for LLFA members:** on this top 10 projects list, if your Authority is listed as the Lead RMA, please check that your Authority is on track to deliver; it's really important for all to check and keep an eye on this. Ron confirmed that the EA is having regular conversations with RMAs and internally to understand where schemes are, and whether they are still deliverable or not. The top 10 is where our focus will be; we need to make decisions early and free up money if projects are not going to deliver.

For OM4's, our target is 51km of river enhanced, and we have claimed 48km so far. We are starting to see projects with integrated delivery. A query was raised if there is any monitoring to see how well these enhancements are delivering. Andy confirmed that the EA's fisheries and biodiversity team will be keeping an eye on this. **Action: Andrew Gill** to provide an update on this in future. It was requested that locations of schemes are added to future presentations.

Fact sheets were discussed for Chesil Cove Curved Seawall Study and Dorset Coast Asset Management System, both of these projects are seeking Local Levy funding. Updated fact sheets were discussed for Dorchester FAS Improvements and Bradpole Surface Water and Groundwater Improvements; both of these projects were previously approved and are on the Levy programme, and these updates are provided for information only.

The Committee:

**Noted the budget and forecast position of the 2019/20 FDGiA Capital, Revenue and Local Levy Programmes and associated Outcome Measures.**

**Approved the 2019/20 updated Levy Programme** in Appendix 3.

**Approved the new Local Levy bid for the Chesil Cove Curved Sea Wall Study**, which is an increase in Local Levy funding for an existing study of £48k, bringing the total Local Levy amount (including previous years) to £158k. Local Levy fact sheet in appendix 4, unanimously approved.

**Approved the new Local Levy bid for Dorset Coast Asset Management System**, for £227,965 Local Levy split over 3 years. Local Levy fact sheet in appendix 5, unanimously approved.

**Noted the updated fact sheet for Dorchester FAS Improvements**, appendix 6.

**Noted the updated fact sheet for Bradpole Surface Water and Groundwater Improvements**, appendix 7.



<b>ITEM 13 – Minutes of Previous Wessex RFCC Meeting</b> <b>Paper for: Information</b>
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**62/19 National Paper – 2020/21 FCRM Grant in Aid (GiA) Indicative Allocation for Capital and Revenue Funding** (agenda item 8)

Ron Curtis went through the national paper for discussion and information.

Nationally, the EA is on track to achieve 300k houses better protected target by March 2021, but challenges remain, and all RFCC programmes are asked to deliver the homes set out in the indicative allocations to ensure the target is met.

The EA is hopeful that a long term funding settlement will be secured in November, and this will result in an investment programme that will deliver more multiple benefit schemes.

An update on the Maintenance programme will be given in January.

**63/19 2020/21 Wessex Indicative Allocation for Capital and Local Choices (for decision)** (agenda item 9)

Andrew Gill presented the paper and went through the presentation.

There was a discussion on the indicative levy bid for Twerton Gate. The Chair clarified that 'indicative levy bid' means that the Committee is approving in principle, but the cheque is not signed yet. Ron Curtis confirmed that the gate is an EA asset and we were given central funding from government for this a couple of years ago as part of the deprived communities' fund. As we go forward, the amount is bigger than the funds available from central government, and we are looking for partnership funding. The EA is working with BANES. This is part of the refreshed idea for schemes; it's about the total refurbishment of the asset, not just the broken gear box.

We will come back to the Committee with a later update on the Property Levy Protection (PLP) project. The change in PF rules means we may be able to re-work the figures. John Harris feels it's really important to keep going forward with this PLP, as it impacts on a lot of communities. Ron Curtis is meeting with the project team on a monthly basis to ensure this is going forward.

We have a healthy Levy programme and balances over the next few years and are managing it well. It was observed that we never know what's going to come up, and it's good to have at least a small Levy balance; we don't want to get it down to zero.

A query was raised, asking if we put inflation into our programme. Ron Curtis stated that for the current 6 year programme, one of the things we have to deliver in addition to the 300k houses target is a 10% efficiency which funds inflation, which is easy to say but doesn't necessarily completely balance out. Andrew Gill confirmed that we do look at project budgets on a monthly basis.

We are hopeful that it will be a bigger 6 year programme for next 6 years, which will require bigger partnership funding. In terms of private money going in to PF, it's pretty modest at the moment (Network Rail, power companies, Highways England, etc.) and we will be looking to increase this.

Note about Appendix 1 – for the Lead RMA names, 'PSO' is a team from the EA. For future papers, we will make this more clear by amending the names (for example, from PSO Somerset to EA PSO Somerset Team)

The Committee:

**Noted the Wessex indicative allocation** and the potential implications for the Wessex programme.

**Consented the Local Choices proposals** summarised in section 2.0 of the paper and the **Wessex Local Choices Capital Investment Programme** (Draft Indicative) as found in appendix 1.

**Noted the Future Years Local Levy Programme** as found in appendix 2.

<b>ITEM 13 – Minutes of Previous Wessex RFCC Meeting</b> <b>Paper for: Information</b>
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**Unanimously agreed in principle the Indicative Local Levy bid for Twerton Gate** as detailed in section 3.0 of the paper.

**64/19 2020/21 Local Levy and IDB Precept Budget Setting (for decision)** (agenda item 10)

The Chair reminded members of the Terms of Reference for this Committee with regards to the voting procedure. For the Levy vote, only members appointed by a lead local flood authority (LLFA) or appointed to represent a group of lead local flood authorities, or the member's named deputy, are entitled to vote. In Wessex, there are 10 LLFA's, and the majority needed to consent a recommendation is 6. There are 8 LLFA members in attendance at this meeting.

Ron Curtis presented the paper and went through the presentation.

**2020/21 Local Levy Setting**

The EA is assuming that the next investment programme will continue to be 6 years, from 2021/22 – 2027/28. A 2% annual increase is the planning assumption agreed in the RFCC's Investment Strategy. Ron presented scenarios for both a 2% and 4% increase.

All 10 of the LLFA's in Wessex have declared a Climate Emergency; this is a real opportunity for LLFA's to show their commitment to tackling the effects of climate change. Ron presented a comparison of what a 2% increase and what a 4% increase would look like; the amount per year is not that much relatively speaking, but over the funding period the increase from 2% to 4% would mean nearly £700k.

Cllr Mike Hewitt (Wiltshire) proposed a 3% Levy increase. There was no seconder for this proposal.

There was much discussion and debate. Some points raised included:

- The need to look at the environment in a different way.
- Some members felt that a 4% increase is justifiable and would help communities become more resilient and adapt to climate change. Others felt restricted as their councils are facing enormous financial pressures and didn't feel they were able to support a 4% increase.
- Other members felt there is a great deal of uncertainty in the world at the moment, and in the public sector; all Authorities are under immense pressure, making supporting a 4% increase difficult.
- Table 1 on page 59 of the papers shows how much a 2% increase and a 4% increase would mean per council, which is only approximately an additional £10k per council (for a 4% increase); this is a small amount of the total council budget. If not invested in flood prevention, we could end up using more money to deal with the consequences of flooding.
- It was good to hear about the efficiency target as part of the earlier presentations. The Committee asked for further information on this. **Action: Secretariat** to include Efficiencies as an agenda item for the January or April Committee meeting.
- It was pointed out that although this is only a 1 year decision, funding formulas for some councils are changing.
- The point was made that for every £1 invested, a further £2 in national funding is secured, which in turn provides an average long term benefit in reduced damage of approximately £8. This is a pot of money that can be spread around for projects that councils can't afford on their own. The counter point to this is that there are lots of other needs in the funding streams, such as health care and the elderly. Some would find it very difficult to sell a bigger increase to their councils at this time.

Cllr Brian Hopkinson (South Gloucestershire) proposed a 4% Levy increase. Cllr Mike Hewitt (Wiltshire) seconded. The vote was 5 for, and 3 against. This was not carried, as the majority needed is 6.

Cllr David Hall (Somerset) proposed a 2% Levy increase. Cllr Mark Roberts (Dorset) seconded. The vote was 3 for, and 5 against. This was not carried.

Cllr Mike Hewitt (Wiltshire) re-proposed a 3% Levy increase. Cllr Bridget Petty (North Somerset) seconded. The vote was 5 for, 1 against, and 2 abstained from voting.

# Wessex Regional Flood and Coastal Committee Meeting

## 14 January 2020

### ITEM 13 – Minutes of Previous Wessex RFCC Meeting Paper for: Information

As things stand, no majority has been reached, and the group agreed to break for lunch in order to allow some members to discuss directly with their councils.

The Chair is not trying to steer the group, but pointed out that it would be better to come to an agreement at this meeting, rather than deferring to the January meeting. Robert Gould agreed. Within the EA, Wessex has a very good reputation for delivering, and it would be a positive outcome to come to an agreement, which would help us nationally to get more funding from Treasury.

Cllr Neil Butters (BANES) re-proposed a 3% Levy increase. Cllr Brian Hopkinson (South Gloucestershire) seconded. The vote was 6 for, 1 against, and 1 abstained. This proposal was carried with the necessary majority.

#### 2020/21 IDB Precept Setting

Roger Burge noted that the IDB understands the benefits we get from the precept and what it enables us to do. GiA was more this year than anticipated, and the concern was raised that whatever increase you put on doesn't come from IDB, it comes from the taxpayers. Roger raised an additional concern in that he understood that the money is not ring-fenced for Somerset, but went into a national pot. Rachel Burden confirmed that the annual IDB precept received by Wessex Area FCRM is ring-fenced to be spent within the Somerset IDB boundary. It's important to point out that IDB precept is separate from Levy setting. Roger is recommending a 0% increase for IDB precept.

Ron Curtis confirmed that the FDGiA was higher than expected this year. Looking forward to next year there is a £300k reduction, and a significant portion of this was in Somerset.

A point was made that this is all about maintenance. A query was raised, asking if we can deliver what needs to be delivered with a 2% increase. Ron confirmed that 2% would see us through this year, but we would need to have a further discussion for future years.

Feedback was given that Committee members would have liked to have more information on this topic, and requested additional information at a future meeting. **Action: Ron Curtis** will present a more in depth agenda item on IDB and where the money is spent at a future meeting.

Cllr David Hall (Somerset) proposed a 2% IDB Precept increase. Anne Fraser seconded. The vote was 11 for, 1 against, and 1 abstained. This proposal was carried with the necessary majority.

The Committee:

**Noted the importance of Local Levy and Internal Drainage Board (IDB) Precept** as sources of funding that are integral to reducing flood risk for many communities and businesses across Wessex.

**Agreed by majority vote the level of Local Levy for 2020/21 to be recommended to the Environment Agency Board as a 3% increase.** (Proposed N. Butters, Seconded B. Hopkinson. 6 for, 1 against, 1 abstained.)

**Agreed by majority vote the level of Internal Drainage Board Precept for 2020/21 to be recommended to the Environment Agency Board as a 2% increase.** (Proposed D. Hall, Seconded A. Fraser. 11 for, 1 against, 1 abstained.)

#### 65/19 National Paper – Partnership Funding for the Future Flood and Coastal Erosion Investment Programme (agenda item 11)

Ron Curtis presented the National paper and went through the presentation.

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The current focus is on the number of houses better protected, with no focus on any of the wider implications. The proposed new Partnership Funding (PF) rules will reflect wider benefits, including environmental benefits, natural flood management, etc.

Asset replacement – where benefit-to-cost ratio makes it a justifiable scheme. Ron presented Brislington Flood Defence scheme as an example; current GiA eligibility is £964k, but with proposed rule changes, it increases to nearly £1.3m, and contributions needed reduces by nearly half from £686k down to £354k.

A query was raised asking where this extra money is coming from. The Chair stated that current indications are that government will double the amount of funding for the next 6 year programme. The Long Term Investment Scenarios report estimates that an average annual investment of £1b per year is needed for the next 50 years.

There was general discussion and broad support for these proposals. Proposed rule change 2.2 (Payment rates) was supported, particularly in respect of the mental health impacts. Proposed rule change 2.4 (Climate Change impacts) will make a huge difference from a coastal perspective.

A query was raised asking if we think there's a risk to the capital programme to the end of 2021 if rules are to be changed. The Chair stated that the EA and Defra have been receiving feedback from this Committee for some time that the current funding rules have been useful but are too constrained: too focused on housing, doesn't recognise improvements on other benefits, significant assets, we need to recognise the need for funding for maintenance, etc. These proposed changes will make a significant step forward.

A point was raised about investment – some financial institutions support fossil fuels industries; would like to see if funds are being held in institutions that do not support fossil fuels. Robert Gould is Chair of the EA's Pensions Committee, and they ensure that the EA's pension funds are sustainably and ethically invested.

**Action: Ron Curtis** to include a paragraph on investment when reporting back on sustainability.

The Committee:

**Noted the progress** in preparing a case for a future FCERM capital programme.

**Noted that outcomes** from a future investment programme will be dependent on amending the Partnership Funding rules, including those coming into operation in April 2021.

**Provided support for the potential Partnership Funding rule amendments being considered by Defra and the EA.**

**66/19 Wessex RFCC Strategy Review** (agenda item 12)

Ron Curtis presented the paper.

A key point to note is the need to move away from protection, and towards adaptation and resilience. This will be a major focus of our work in future. **Action: Secretariat** to send a copy of the RFCC strategy to newer members for reference.

The current vision stated in the Wessex RFCC Strategy is still fit for purpose. The vision states: Increasing the resilience of people, property, infrastructure and businesses in Wessex to the risks of flooding and coastal erosion working ideally with an integrated and sustainable approach.

Ron proposed that we roll the current strategy forward, and defer any major review until after the EA's FCERM Strategy is confirmed and published. For Local Levy and IDB Precept Funding, a revised funding Strategy will be presented at the July 2020 Committee meeting for agreement, to prepare for the Levy/IDB setting vote at the October 2020 meeting.

# Wessex Regional Flood and Coastal Committee Meeting

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There was a discussion about the word 'resilience'. It was agreed that a better explanation and definition of resilience is needed.

The Committee:

**Agreed that the Strategy Vision and Objectives are fit for purpose** pending a more major review in the second half of 2020.

**Agreed the proposed approach to extending the concept of Priority Places** for investment to other areas of the Committee's work.

**Agreed the proposed timeline for reviewing the Local Levy and IDB Precept Funding Strategy.**

#### **67/19 Matters Arising from Information Papers** (agenda item 13)

Paper B – River Basin Management Plans

Ron suggested bringing this back to January meeting, with a more comprehensive paper. The Chair noted that Neil Watson has taken a lead on this in Wessex. **Action: Secretariat** to add to January agenda.

#### **68/19 Minutes of Previous Meetings** (agenda item 14)

The minutes of the meeting held on 9<sup>th</sup> July 2019 were approved. All agreed for accuracy.

#### **69/19 Matters Arising from Minutes** (agenda item 15)

The actions captured in the minutes were noted. It was requested that the Secretariat create a separate action list, to be circulated with the minutes.

#### **70/19 Any Other Business** (agenda item 16)

The Chair asked for feedback from members about the meeting venue, as this is the first time we have used this venue. Overall the venue is fine, although the acoustics were not particularly good, and it is not possible to use public transport to get to this venue. There was a discussion about the possibility of web or video conferencing; general consensus of members was that this type of meeting is better as a face to face, as the networking aspect of the meeting is as valuable as the meeting itself. Some members prefer a venue with ample parking that is easy to get to; other members prefer a venue that is accessible via public transport. For the next meeting, we will try to secure a venue which is accessible by public transportation.

John Harris wanted to clarify for the new Committee members that the term 'revenue' is equivalent to maintenance spending (maintaining assets).

New member induction – the Secretariat will organise a new member induction for those who wish to attend, and will contact the new Committee members when details are confirmed.

#### **71/19 Date of Next Meeting**

Tuesday, 14<sup>th</sup> January 2020, location and venue tbc

## OUTCOME MEASURE DEFINITIONS

**2015/16 TO 2020/21**

OM1	The ratio of the whole life present value benefits (PVB) to the whole life present value costs (PVC) from projects in the FDGiA capital investment programme
OM2	Number of households moved out of any flood probability category to a lower probability category
OM2b	The number of households moved from the very significant or significant probability category to the moderate or low probability category
OM2c	The number of households in the 20% most deprived areas moved out of the significant or very significant probability categories to the moderate or low probability category.
OM3	The number of households with reduced risk of coastal erosion
OM3b	The number of households protected against loss in 20 yrs from coastal erosion
OM3c	The number of households in the 20% most deprived areas protected against loss in 20 yrs from coastal erosion
OM4a	Hectares of water dependent habitat created or improved to help meet the objectives of the Water Framework Directive
OM4b	Hectares of intertidal habitat created to help meet the objectives of the Water Framework Directive for areas protected under the EU Habitats/Birds Directive
OM4c	Kilometres of rivers protected under the EU Habitats/Birds Directive improved to help meet the objectives of the Water Framework Directive
OM5	The proportion of households and businesses in highest risk areas that receive the Floodline Warnings Direct (FWD) service
OM6	The proportion of residential units within planning decisions where the application has been refused or has been amended in line with Agency advice

## LIST OF ABBREVIATIONS

ABI	Association of British Insurers
ADA	Association of Drainage
Authorities AEP	Annual Exceedance Probability
AFRCM	Area Flood and Coastal Risk Manager
AIMS	Asset Information Management System
AMP	Asset Management Plan
AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
AP	Asset Performance
BAP	Biodiversity Action Plan
BCR	Benefit Cost Ratio
CAMC	Creating Asset Management Capacity
C@R	Communities at Risk
CDM	Construction & Design Management Regulations
CFMP	Catchment Flood Management Plan
CIL	Community Infrastructure Levy
CIWEM	Chartered Institution of Water & Environmental Management
CLA	Country Land and Business Association
CSR	Comprehensive Spending Review
DCLG	Department for Communities and Local
Government Defra	Department for Environment, Food & Rural
Affairs DN&L Area	Derbyshire, Nottinghamshire & Leicestershire
Area DoI	Declaration of Interest
EA	Environment Agency
EFRA	Environment, Food & Rural Affairs Committee
EIA	Environmental Impact Assessment
EMP	Eel Management Plan
FAS	Flood Alleviation Scheme
FCERM	Flood & Coastal Risk Management
FCRM GiA	Flood & Coastal Risk Management Grant in Aid
FRA	Flood Risk Assessment
FRMP	Flood Risk Management
Plan FSoD	Financial Scheme of
Delegation FWD	Flood Warnings Direct
FWMA	Flood & Water Management Act
GiA	Grant in Aid
IDB	Internal Drainage
Board KPI	Key Performance
Indicator LA	Local Authority
LDF	Local Development Framework
LEP	Local Enterprise Partnership



LLFA	Lead Local Flood Authority
LPA	Local Planning Authority
LPRG	Large Project Review Group
LRF	Local Resilience Forum
LTIS	Long Term Investment Strategy
mAOD	Metres Above Ordnance Datum
MEICA	Mechanical, Electrical, Instrumentation, Control and Automation
MTP	Medium Term Plan
NAO	National Audit Office
NaFRA	National Flood Risk Assessment
NCPMS	National Capital Programme Management Service
NFU	National Farmers Union
NPPF	National Planning Policy Framework
NRW	National Resources Wales
OM	Outcome Measure
PAB	Project Approval Board
PAG	Programme of Acceleration & Growth
PF	Partnership Funding
PFRA	Preliminary Flood Risk Assessment
PLP	Property Level Protection
PSO	Partnerships and Strategic Overview
RBMP	River Basin Management Plan
RFCC	Regional Flood & Coastal Committee
RMA	Risk Management Authority
SAB	SuDS Approval Body
SAC	Special Area of Conservation
SAMP	System Asset Management Plan
SEA	Strategic Environmental Assessment
SFRA	Strategic Flood Risk Assessment
SHW&G Area	Shropshire, Herefordshire, Worcestershire & Gloucestershire Area
SLA	Service Level Agreement
SMP	Shoreline Management Plan SoP      Standard of Protection
SPA	Special Protection Area
SRA	Somerset Rivers Authority
SSSI	Site of Special Scientific Interest
STW	Severn Trent Water
SuDS	Sustainable Drainage System
SWMP	Surface Water Management Plan
SW&WM Area	Staffordshire, Warwickshire & West Midlands Area
WEM	Water and Environmental Management
WFD	Water Framework Directive
WLMP	Water Level Management Plan

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