

Flood Risk Management Action Plan 2022/23

Report of the Head of Planning, Transportation and Environment

Please note that the following recommendations are subject to consideration and determination by the Cabinet (and confirmation under the provisions of the Council's Constitution) before taking effect.

Recommendations: That

- (a) Budgets are allocated to the Annual Flood Risk Management Plan schemes in the 2022/23 Action Plan as set out in Appendix B, noting the level of overprogramming planned;
- (b) Amendments to the Revenue and Capital allocations are delegated to the Head of Planning, Transportation and Environment in consultation with the Cabinet Member for Public Health, Communities and Equality.

1. Summary

The purpose of this report is to present to Cabinet the achievements of Devon County Council's (DCC) Flood & Coastal Risk Management Team in delivering the essential flood improvements approved in the 2021/22 Action Plan and to seek approval for the new 2022/23 Action Plan. The report details how DCC has worked in partnership with the other Risk Management Authorities to reduce the risk of flooding to residential and commercial properties across Devon and the level of external funding that has been and will continue to be secured to support delivery of these much-needed improvements.

2. Update on Achievements for 2021/22

The Flood & Coastal Risk Management team have had another busy and successful year despite the ongoing pressures with the pandemic and need to work from home. To maintain a high level of service the team meet regularly to communicate and coordinate the delivery of their responsibilities as a Lead Local Flood Authority (LLFA) and the essential programme of flood improvements.

With regards to physical works, over £1.5million of major flood improvements have been delivered in Sidmouth, Ivybridge, Stokeinteignhead, Harbertonford, South Pool and Chillington providing a reduction in flood risk to over 200 properties. A more detailed account of these projects can be found in Appendix A of this report.

In addition, a number of schemes have been investigated and designed ready for delivery in future years.

The ongoing risk of flooding continues to be evident with a number of significant events over the year including property flooding over the 2021 Christmas period. Two events in October required the production of a Section 19 Flood Investigation

Report, in line with the Flood & Water Management Act. This first event was on the 4th-5th October 2021 and caused internal flooding to 25 properties across Devon, 9 of which were in Exeter. The [S.19 report for this event](#) has been published and is available on our website. The second event occurred on 20th-21st October 2021, with 97 properties across Devon reported to have flooded internally. The worst affected areas were Axminster with 42 properties, Seaton with 20, Woodbury 6 and Kenton 5 properties. This second report has now been finalised and uploaded to the DCC Flood Risk website, [here](#).

DCC is a Statutory Consultee to the Local Planning Authority for the management of surface water on new major developments. Over the past 12 months we have reviewed 573 applications to ensure they are providing appropriate sustainable drainage systems, in line with national standards and our own local guidance, to manage the risk of flooding from surface runoff, both on and off the new development.

As the LLFA DCC is responsible for consenting to works on Ordinary Watercourses and enforcing any illegal activity or blockages, where appropriate, to reduce flood risk. The number of applications received annually continues to rise since taking on this role in 2012, with 134 consents issued in 2021 compared with 106 in 2020 and 91 in 2019. The increased installation of natural flood management measures, such as leaky dams, is one reason for the rise in consent applications.

3. Proposed Action Plan for 2022/23

The proposed Action Plan for 2022/23 is provided in Appendix B showing how we propose to invest in flood risk management activities over the coming year.

We are currently in the first year of Defra's 6 year programme for 2021-27. In anticipation of this there are four major schemes (Sidmouth, Colaton Raleigh, Beeson Broadhempston) and a number of smaller interventions in the pipeline for delivery in 2022/23. These make up the majority of spending in 2022/23.

The majority of activity on flood improvement schemes will be the commencement, or continued progression, of new detailed assessments to identify the risk in our highest priority communities. This will enable a pipeline of future investment in these areas within the current Defra Flood & Coastal Erosion Risk Management Programme for 2021-27. Studies have been commissioned for Barnstaple (continuation of previous work), Exeter Phase 3, Ilfracombe, Teignmouth, Exmouth, Crediton, Newton Abbot, Bideford, Okehampton, Dawlish, Budleigh Salterton and Seaton.

Opportunities for delivering natural flood management (NFM), where the risk of flooding to properties can be reduced, will be explored in partnership with other Risk Management Authorities and in collaboration with non-government organisations. A number of initiatives are ongoing and will continue to be supported during 2022/23. All capital projects will also consider the benefits of upper catchment NFM to enhance the standard of protection being provided.

4. Options/Alternatives

With the ongoing risk of flooding across the county and the exacerbating effect of climate change it is considered to be a high priority for the County Council to help make our communities more resilient. The options to 'do nothing' or 'do minimum' have, therefore, been discounted. A list of high priority communities has been identified in the Local Flood Risk Management Strategy, updated and published in 2021. These areas will be fully investigated to understand the level of local flood risk and further consideration will then be given to any potential flood improvements that could be promoted to help make properties more resilient.

All options will need to consider the opportunities for collaborating with other Risk Management Authorities and partnership with non-government organisations to maximise funding and achieve multiple benefits.

5. Consultations/Representations/Technical Data

When considering flood improvements, it is important to engage with other Risk Management Authorities, key stakeholders and members of the public at the earliest opportunity, especially with those who will benefit from any potential works. Early consultation will help to fully understand the needs of others and will open up opportunities for collaboration. It will also assist in managing expectations from the outset.

The Council's highest priority areas were set out in the revised Local Flood Risk Management Strategy published in 2021. A full public consultation was carried out to gain feedback on the draft document and all comments were taken into account when finalising the [published version](#). Detailed assessments are now being progressed in line with the Local Strategy.

The level of consultation will be proportionate to the proposed investment and the area benefitting from any potential flood improvements. For direct property resilience measures there may only need to be consultation with the individual property owners, whereas larger capital schemes will need to be consulted across the wider community and other potential project partners.

The transparent sharing of data with partners helps maximise multiple benefits and funding opportunities to deliver a more holistic scheme, that will not only reduce flood risk but will also enhance and protect the natural and historic environment.

6. Financial Considerations

The funding mechanism for Flood and Coastal Erosion Risk Management is complex and is based on a strong cost benefit justification that requires additional partnership funding contributions to unlock the opportunity for Defra's Flood Defence Grant in Aid (GiA). The DCC Flood Risk Management priorities set out in the Local Strategy are estimated to cost in excess of £16 million within the funding period 2021-27 with the potential of up to £10 million of GiA contributions. Other funding through Local Levy, DCC capital budgets and other partner contributions will need to be sought to maximise delivery of our ongoing yearly Action Plans. Schemes will only be

delivered if they are proven to be cost-beneficial and affordable and the necessary funding is secured, minimising the risk on DCC.

The early years of the current programme 2021-27 includes a number of schemes ready for delivery, as well as detailed investigations of several areas identified as high priority catchments in order to inform and identify potential flood improvements. The majority of these costs will be covered by the DCC revenue budget, as detailed in the Annual Action Plan for 2022-23 (See Appendix B) together with some GiA to support the determination of the preferred option. It should be noted that early draw-down of GiA is part of the total allocation that can be justified for the whole scheme delivery and therefore will reduce the available budget for scheme construction. DCC's financial commitment towards managing flood risk is therefore paramount to the ongoing delivery of essential flood improvements.

In addition to the studies and investigations currently underway and being supported by the DCC FRM revenue budget, there are a number of schemes that are progressing through detailed design and some that will enter the construction stage within 2022/23. These are shown on the attached Action Plan (Appendix B) with allocations being made from the DCC FRM capital budget and further supported by Defra GiA and Local Levy.

The financial highlights for 2022/23 are:

Item	FCRM Revenue £k	FCRM Capital £k	External £k	Total
FCRM Resources etc.	420			
Studies & Investigations	285		30	
Local Improvements, NFM, Maintenance & Contingency	295			
Capital Projects		460	1,130	
Total Programme with over allocation	1,000	460	1,160	2,620
Budget	842	460	1,160	2,462

The total figures are showing an overallocation of the revenue budget of approximately 19% to account for the uncertainties with scheme development and delivery, including design challenges, resource availability, landowner agreements, notice periods and embargos, alignment of other funding sources, the weather and any ongoing issues affected by the current pandemic. The total capital budget shown includes an expected £110,000 carry over from 2021/22 which will be subject to approval. It will also require some allocation to support projects running into 2023/24. Up to £30k of additional GiA will be requested, subject to approval, to support the revenue funding of the initial studies and investigations.

7. Legal Considerations

The lawful implications/consequences of the proposals/recommendations/proposed course of action have been considered and taken into account in the preparation of this report/formulation of the recommendations set out above and will be adhered to accordingly.

Devon County Council is classed as a Lead Local Flood Authority under the Flood and Water Management Act 2010 and is duty bound by the roles and responsibilities defined by the Act, as well as having specific powers determined in the Land Drainage Act 1991.

All activities carried out by DCC in connection with our role as the LLFA will be in accordance with the relevant legislation. Powers of consenting and enforcement will be used as required to ensure watercourses are maintained and flood risk minimised. All legal requirements when carrying out flood improvements will be adhered to, such as entry onto third party land or working on the public highway.

8. Environmental Impact Considerations (Including Climate Change)

To support the production of the revised Local Flood Risk Management Strategy a full Strategic Environmental Assessment was carried out and will be referred to when carrying out flood improvements to ensure any impact on the environment is minimised. All major capital flood schemes will also require a bespoke Environmental Assessment to consider not only what impact there may be on the environment as a consequence of the works but also to identify any enhancements that can be achieved.

The effects of climate change are having a significant impact on the risk of flooding with more intense and prolonged periods of rainfall. All schemes being delivered by DCC and those being reviewed through our statutory role for major development proposals will be required to mitigate the increased risk and to take account of current government guidance and predictions within any detailed calculations.

All activities by the Flood and Coastal Risk Management Team will consider the reduction of carbon emissions in order to support the County Council's target to achieve a 'net zero' by 2030. Where practical, the schemes will include natural flood risk management techniques, in accordance with best practice. These have the opportunity for a net gain in biodiversity and carbon reductions.

9. Equality Considerations

Where relevant to the decision, the Equality Act 2010 Public Sector Equality Duty requires decision makers to give due regard to the need to:

- eliminate discrimination, harassment, victimisation and any other prohibited conduct;
- advance equality by encouraging participation, removing disadvantage, taking account of disabilities and meeting people's needs; and
- foster good relations between people by tackling prejudice and promoting understanding.

Taking account of age, disability, race/ethnicity (includes Gypsies and Travellers), gender and gender identity, religion and belief, sexual orientation, pregnant women/new and breastfeeding mothers, marriage/civil partnership status in coming to a

decision, a decision maker may also consider other relevant factors such as caring responsibilities, rural isolation or socio-economic disadvantage.

This may be achieved, for example, through completing a full Equality Impact Needs Assessment / Impact Assessment or other form of options/project management appraisal that achieves the same objective.

To support the development of the Local Flood Risk Management Strategy a full Impact Assessment was completed and is also available to view on the Council's website at: <https://www.devon.gov.uk/impact/flood-risk-management-strategy/>.

All flood risk management activity will be assessed and prioritised based on risk. The delivery of flood improvements will be dependent on their affordability, cost benefit justification and approval of funding.

10. Risk Management Considerations

The risk of flooding to many properties in Devon is high especially from surface runoff in rural locations, as such it is identified as a high risk in the corporate risk register.

The list of priority locations within the Local Strategy has been determined following a risk-based approach i.e. those communities at greater risk based on the criteria set out in the Strategy. With many rural communities in Devon having low numbers of properties to protect, a number of factors need to be taken into account to ensure they receive the support they require.

The funding mechanism for flood risk management is complex and is generally aligned to the number of properties benefitting but does not cover all costs associated with delivering the flood improvements. The system encourages partnership working and expects contributions from partners to support the Grant in Aid available from Defra, subject to cost benefit justification. There are risks associated with generating the necessary partnership contributions and does heavily rely on DCC's commitment for making communities more resilient to flooding and the funding associated with that.

Delivery of flood improvements often requires negotiations with third party landowners for entry and potential construction on their land, which can be a lengthy process. There may also be the need for obtaining planning permission or listed building consent. Both of these are outside of our control and are risks that could affect the delivery programme.

The Annual Action Plan at Appendix B sets out the investment programme for 2022/23 and the proposals identified will be carried out in line with current legislation, best practice and guidance to minimise the risk and safeguard the Council's position.

11. Public Health Impact

The effects of flooding have a significant impact on public health as well as the mental and physical damage on individuals. This is recognised in the formula for calculating benefits for the delivery of essential flood improvements. The floodwater is often contaminated with sewage which can cause serious illness and also the depth of flooding creates a significant risk of drowning. The ongoing programme of flood improvements being promoted by DCC will help reduce the risk to public health and continue to make Devon a better place to be.

12. Summary/Conclusions/Reasons for Recommendations

The threat of flooding continues to be a high risk for Devon's communities and the ongoing support from Devon County Council is paramount for monitoring and reducing that risk. The Flood & Coastal Risk Management Team is well established in DCC and continues to maintain the required level of resource to deliver the statutory responsibilities expected of a Lead Local Flood Authority and to deliver essential flood improvements across the County. An optimistic programme of flood improvements is being developed in accordance with the highest priorities set out in the Local Flood Risk Management Strategy for Devon. The Action Plan for 2022/23 identifies the proposed investment for developing the programme that will help reduce the risk of flooding to those communities in Devon.

Dave Black
Head of Planning, Transportation and Environment

Electoral Divisions: All

Cabinet Member for Communities, Public Health and Equality: Councillor Roger Croad

Local Government Act 1972: List of Background Papers

Contact for Enquiries: Martin Hutchings

Tel No: 01392 383000 Room: 120, County Hall, Exeter EX2 4QD

Background Paper	Date	File Reference
National Flood & Coastal Erosion Risk Management Strategy	July 2020	
Local Flood Risk Management Strategy for Devon	March 2021	

Annual Action Plan 2022/23 – Appendix B

Flood Risk Management Action Plan 202223 - Final

Appendix A to PTE/22/9

Achievements for 2021/22 by DCC's Flood & Coastal Risk Management team

1.0 Introduction

This report provides an update on the flood improvement schemes delivered during 2021/22 and the communities that have had a reduction in the risk of flooding as a result.

2.0 Flood Improvement Projects

2.1 Ivybridge Natural Flood Management

Following on from the successful completion of the flood scheme in Claymans Pathway, a series of Natural Flood Management measures (woody debris dams and a leaky fence), and improvements to a grill and culvert inlet were completed.



Leaky fence and woody debris dams



Inlet (before improvements)



Inlet (after improvements)

2.2 Property Flood Resilience (PFR)

The PFR programme continues to be well received with 19 more properties being completed this financial year through DCC's bespoke PFR Funding Scheme at a cost of £75,000.

Details of the scheme can be obtained from the DCC FRM website at the following link: <https://www.devon.gov.uk/floodriskmanagement/flood-resilience/property-flood-resilience-funding-scheme/>

Harbertonford PFR – To support the Environment Agency, DCC is delivering a PFR scheme for 4 properties following a recent flood event that caused internal flooding to properties in the Harbourne Terrace area. The cost of the scheme is approximately £45K to provide a higher standard of flood protection. A further 3 properties opted out of the scheme as they have been proactive in installing their own resilience measures.

South Pool PFR – A PFR scheme is currently being delivered in the village to provide better protection to 10 properties at a cost of £36k.

2.3 Sidmouth Surface Water – The Knowle Amphitheatre

The c.£1.5million surface water scheme situated at the Knowle in Sidmouth is now complete and operational offering protection to over 100 properties. The scheme, designed by Jacobs, includes an innovative design that collects surface water from a key flow path into the town and conveys it through a newly formed swale into the storage feature, which has been built in

the form of an amphitheatre that not only offers the required storage, but the ability to act as a dual use amenity area for the local community.



The opening ceremony attended by representatives of Devon County Council, East Devon District Council, Sidmouth Town Council, Jacobs and the contractor, South West Highways was also attended by representatives from the Environment Agency and the Regional Flood & Coastal Committee Chair, Philip Reese.



Challenges due to the weather were experienced during the construction which resulted in a significant increase to the original costs. An additional £154k of Defra GiA was made available to support these additional costs. In total £1.04million GiA and £30,000 Local Levy was secured and together with over £400k from DCC enabled the scheme to be delivered.

2.4 Stokeinteignhead

The surface water scheme in Stokeinteignhead (Teignbridge) has now commenced its second phase of construction. The initial phase, completed in March 2021, included highway drainage

improvements and much improved buddle holes on the roads on the route into the village to get as much water off the highway as possible.



The second phase of work involves a community wide PFR scheme giving benefit to 40 properties. This element of the scheme has been a particular challenge given all properties are in a conservation area and 50% are listed. This has led to significant consultation and coordination with Teignbridge District Council's planning department.



The scheme is utilising the EA's PFR framework with the contractor, Watertight International, utilising timber gates that are British Standard Kitemarked to give the village passive flood protection. Installation of the PFR measures is due to be completed prior to April 2022.

2.5 Chillington

The construction phase of the flood alleviation scheme in Chillington is now well underway at the time of writing the report and due to be complete by the end of February 2022.

The cost of the scheme is estimated to be approximately £100,000 including a contingency. DCC submitted a business case to the Environment Agency and has gained £65,000 of Flood Defence Grant-in-Aid (FDGiA) towards the scheme, £20,000 is being contributed from the Local Transport Plan maintenance grant, with the balance from being provided by DCC's capital budget. Once the works are complete, 15 residential properties and 5 commercial properties will be better protected against flooding.

A section of the A379 had to be closed in February 2022, outside of the traffic-sensitive embargos, to install the new drainage structures on the road. Following a road closure consultation, which included the District and Parish Councils and other key stakeholders, it was established that this period was considered one of the quietest times of the year and also more appropriate than a closure during school holidays, helping to reduce the impact in the area.

Additional to these works, DCC is working towards an agreement for improved buddle holes along Coleridge Lane. This will reduce maintenance and blockages of the existing structures as well as reducing the volume of surface water at the lower junction with the A379.

3.0 Development of future schemes

A number of projects are continuing to be developed for delivery in 2022/23 in particular those at Broadhempston, Beeson and Colaton Raleigh. Further studies are also well underway at Sidmouth Town Centre, Barnstaple and Teignmouth. In addition, DCC has commissioned new studies at Bideford, Crediton, Newton Abbot, Budleigh Salterton, Seaton and Exmouth to review the surface water flood risk in these locations in accordance with the Local Flood Risk Management Strategy published early 2021.

Appendix B to PTE/22/9

Devon County Council Action Plan for 2022/23

Projects/Works/Schemes	Lead Authority	Study, Design or Works	2022/23 DCC FRM Contribution £ Revenue	2022/23 DCC FPW Contribution £ Capital	Other Funding £	Details of Proposal
Devon						
Flood Risk Management Team	DCC	-	420,000			Resources required to deliver the Flood Risk Management functions as the Lead Local Flood Authority and Statutory Consultee for SuDS.
Local Flood Improvements and contingency	DCC/Others	W	120,000			Delivery of local flood improvement works (subject to resources and in accordance with the DCC priority list and opportunities with other Risk Management Authorities/Local Communities) and an allocation for contingency/risk to support other improvement works.
Property Flood Resilience	DCC/Others	W		95,000	165,000	Allocation of funds for flood resilience measures through the Property Flood Resilience Funding Scheme. Supported with additional Flood Defence Grant in Aid and Local Levy, subject to approval, for the delivery of Axminster PFR and completion of Harbertonford and South Pool PFR schemes.

DRAFT DOCUMENT

Community Resilience and support	DCC	S/W	25,000			To support delivery and provision of grants through the Devon Community Resilience Forum and to provide assistance to communities for the delivery and provision of Flood Resilience Measures and Emergency Planning.
Natural Flood Management / Working with Natural Processes	DCC/Others	S/W	130,000			To develop best practice and progress opportunities for delivering natural flood risk management techniques in partnership with other RMAs and key stakeholders, including Northern Devon Nature Based Solutions.
Maintenance of Flood Improvements	DCC	W	20,000			Maintenance of installed flood improvements, monitoring and gauging equipment.
East Devon						
Sidmouth Town Centre Surface Water	DCC	W	20,000	150,000	550,000	Delivery of surface water drainage improvements in the town centre.
Colaton Raleigh	DCC	S	10,000	20,000	230,000	Catchment study, consideration of options and delivery of preferred option of upstream natural flood management and PFR measures.
Budleigh Salterton	DCC	S	10,000			Assessment of flood risk from surface water and ordinary watercourses and consider options for potential improvements and funding opportunities.
Exmouth	DCC	S	30,000			Assessment of flood risk from surface water and ordinary watercourses and consider options for potential improvements and funding opportunities.
Seaton	DCC	S	10,000			Assessment of flood risk from surface water and ordinary watercourses and consider options for potential improvements and funding opportunities.
Exeter						
Exeter Phase 3	DCC	D	30,000			Carry out investigations for Phase 3 of the surface water management improvements on the Northbrook, Longbrook, Pinbrook and Larkbeare.

DRAFT DOCUMENT

Mid Devon						
Crediton	DCC	S	10,000			Initial assessment of flood risk from surface water and ordinary watercourses and consider options for potential improvements and funding opportunities.
Tiverton	DCC	S	30,000			Assessment of flood risk from surface water and ordinary watercourses and consider options for potential improvements and funding opportunities.
North Devon						
Barnstaple	DCC	S	15,000	15,000		Assessment of flood risk from surface water and ordinary watercourses and consider options for potential improvements and funding opportunities.
Ilfracombe	DCC	S	10,000			Review of Surface Water Management Plan and potential options.
South Hams						
Beeson	DCC	D/W	5,000	100,000	75,000	Scheme to increase culvert capacity in the village and ensure risk is not passed on to others.
Totnes	DCC	S	20,000			Assessment of flood risk from surface water and ordinary watercourses and consider options for potential improvements and funding opportunities.
Dartmouth	DCC	S	10,000			Initial assessment of flood risk from surface water and ordinary watercourses and consider options for potential improvements and funding opportunities.
Teignbridge						
Broadhempston	DCC	D/W	5,000	80,000	110,000	Detailed design and delivery of PFR focussed flood improvements.
Dawlish	DCC	S	15,000			Assessment of flood risk from surface water and ordinary watercourses and consider options for potential improvements and funding opportunities.

DRAFT DOCUMENT

Teignmouth	DCC	S	10,000			Review of Surface Water Management Plan and potential options.
Newton Abbot	DCC	S	15,000			Assessment of flood risk from surface water and ordinary watercourses and consider options for potential improvements and funding opportunities.
Torrige						
Bideford	DCC	S	15,000			Assessment of flood risk from surface water and ordinary watercourses and consider options for potential improvements and funding opportunities.
West Devon						
Okehampton	DCC	S	15,000			Assessment of flood risk from surface water and ordinary watercourses and consider options for potential improvements and funding opportunities.
Total Budget Allocation			1,000,000	460,000	1,130,000	£2,590,000
<p>The above budget allocations are estimates that are subject to change or maybe deferred as other priorities and opportunities arise. The total revenue expenditure currently shows a 19% over-budget spend to allow for delays, efficiencies, rounding, reprioritising and contingency. This will be monitored throughout the year to ensure the available budget is not exceeded and will defer projects as required. All external funding is subject to approval through a business case with cost benefit justification.</p>						
Incoming Budgets						
PT&E Flood Revenue Budget			835,000			Grant to fulfil requirements as the LLFA as defined under the Flood and Water Management Act.
Budget reduction for 2022/23			-30,000		30,000	Revenue budget cut to be supported by potential draw-down of Defra Grant in Aid for preliminary studies.
Miscellaneous Income			3,000			Fees for consents and recharges etc.
PT&E Flood Capital Budget 2022/23				350,000		Capital funding for Flood Risk Management.

DRAFT DOCUMENT

PT&E Flood Capital Budget pre 22/23				110,000		Expected variance 2021/22 is £234k at month 10. This will be the subject of a carry forward request, of £110k to 2022/23 and £124,000 to 2023/24 to support project delivery.
FDGiA / Local Levy					1,130,000	Defra Grant in Aid and Local Levy administered by the SWRFCC.
Capital recharge through Defra funded project			34,000			Staff resource for the Defra funded Flood & Coastal Resilience Innovation Project.
Total Budget			842,000	460,000	1,160,000	£2,586,000