PTE/17/63

Corporate, Infrastructure and Regulatory Services Scrutiny Committee
28 November 2017

The Role of Risk Management Authorities in Delivering Flood Risk Management

Report of the Head of Planning, Transportation and Environment

1. Summary

The aim of this report is to advise the Committee on the progress being made by Devon Risk Management Authorities (RMAs)* in their delivery of flood risk management functions. Initially, an update is provided on the Devon County Council (DCC) role as Lead Local Flood Authority and the measures that it is taking to reduce the risk of flooding to properties in Devon. Thereafter, the report outlines the results of a recent questionnaire, circulated to all Devon RMAs on behalf of the Scrutiny Committee Chairman. This focusses on the resources available within each RMA and how they are operating collaboratively, in accordance with the Local Flood Risk Management Strategy, to make Devon more resilient to flooding.

* Risk Management Authorities, as defined in the Flood and Water Management Act 2010:
- Environment Agency
- Lead Local Flood Authority (DCC - Flood & Coastal Risk Management Team)
- Water Company (South West Water)
- Highway Authorities (DCC Highways and Highways England)
- District Councils (East Devon, Exeter, Mid Devon, North Devon, South Hams, Teignbridge, Torridge and West Devon Borough Council)
- Internal Drainage Board (Braunton).

2. DCC Statutory Responsibilities as Lead Local Flood Authority (LLFA)

2.1 Local Flood Risk Management Strategy

The 'Local Strategy' was published in June 2014 and is used to advise on the roles and responsibilities of all Devon RMAs and how they should work collaboratively to reduce the risk of flooding from all sources. The document also details how investment is prioritised and this is linked with an annual DCC Action Plan, setting out where attention is to be focused and how funding is to be allocated.

A half yearly newsletter is produced each spring and autumn to update all of the key stakeholders, including District, Parish and Town Councils, elected members and key partners, of the works being progressed by DCC in its LLFA role. This, together with the Strategy and Action Plan, can be found on the DCC website at https://new.devon.gov.uk/floodriskmanagement/local-flood-risk-management-strategy/

2.2 Preliminary Flood Risk Assessment (PFRA)

The Devon PRFA, first published by DCC in May 2011, addressed the level of flood risk across Devon from surface water, ordinary watercourses and groundwater; this was due for review after 6 years. This process was completed using the template forms provided by the Environment Agency and submitted prior to the June 2017 deadline. Due to the knowledge gained through our detailed programme of Surface Water Management Plans and Drainage Assessments, together with the experience of flood events across Devon in recent years, the review process did not identify any significant flood risk areas that we were previously

unaware of. The Exeter area, however, has been designated as a new 'Flood Risk Area', based on a revised threshold set for number of properties at risk. What this actually means for reporting purposes has not yet been confirmed but, with the level of assessment already carried out for the Exeter Surface Water Management Plan and the investment by the Environment Agency for the River Exe, this is unlikely to generate any significant further investigations.

2.3 Flood Investigations

Since the previous report to the former Place Scrutiny Committee, we have only needed to compile one Section 19 Flood Investigation Report; this related to Storm Angus on 19th – 20th November 2016. This event caused flooding to a reported 93 properties, with the main areas affected being in North and East Devon. A copy of the published report can be found on the DCC website at https://new.devon.gov.uk/floodriskmanagement/flood-investigations-reports-and-studies/

2.4 Asset Register

In consultation with the other RMAs, we have gathered information relating to flood risk assets in the required form of an 'Asset Register', which has been compiled using a Geographical Information System (GIS). This is available to view online using our comprehensive DCC environment mapping facility. The list is not exhaustive as we only highlight third party assets that may have an influence on flood risk and do not duplicate comprehensive lists held by other RMAs as asset owners.

The online Asset Register can be found on the DCC website at:
https://new.devon.gov.uk/floodriskmanagement/asset-register/

2.5 Statutory Consultee for Surface Water Management on new Major Development

Since taking over the responsibility, in April 2015, for advising on the suitability of surface water management proposals for new major development applications, the DCC Flood & Coastal Risk Management Team has reviewed and responded to over 1700 planning applications, as well as responding to many informal requests from developers, consultants and members of the public. This is almost double the number expected based on our initial discussions with the Local Planning Authorities prior to taking over the role.

As well as these statutory consultations on 'major development', we are also often approached by District Councils and Dartmoor National Park to provide advice on 'minor' applications, as some authorities lack the technical resource internally. However, neither is DCC resourced to provide such non-statutory input, meaning that to such requests have to be considered in line with current workload and priorities.

2.6 Land Drainage Consents

Any works that are proposed on an 'Ordinary Watercourse' requires a Land Drainage Consent from DCC. On average we receive approximately 50 formal applications per year, which we review and consent where appropriate to do so. We also receive many requests for advice as to whether formal consent is required for some minor clearance and maintenance works, on which we advise accordingly.

3. DCC Role in Supporting Flood Prevention

3.1 Flood Improvement Schemes

Although not a statutory function, DCC is supporting a large number of flood prevention projects across Devon, in accordance with the Local Flood Risk Management Strategy and its associated annual Action Plan. These range from small investigations through to delivery of major capital flood improvement works. It will often take up to five years to progress such schemes, from initial investigations through to final delivery. The DCC programme has now reached a point of maturity, such that circa £4 million of capital flood improvements will be delivered through 2017 and 2018. These schemes will benefit from significant funding through Defra's Flood Defence Grant in Aid, the 'Local Levy' (administered by the South West Regional Flood and Coastal Committee - SWRFCC) and partnership contributions from other Risk Management Authorities, as well as DCC's own flood risk budgets.

High priority schemes are currently being delivered in Axminster, Modbury, Braunton, Ivybridge, Stokeinteignhead, Uplyme and Bideford. Collectively, these schemes will reduce the risk of flooding to approximately 380 properties; additional properties will benefit from the numerous smaller schemes being delivered through the Action Plan. Further details relating to these high priority schemes is provided in Appendix A of this report.

3.2 Community Resilience

As part of the legacy of the Defra funded Pathfinder Project, which focused on providing resilience measures to communities to help them help themselves and to support others, the Devon Community Resilience Forum has been set up and is now well established. Its operations are supported jointly by DCC, Police, Fire Service, Environment Agency, Plymouth and Torbay Councils, District Councils and Devon Association of Local Councils and administered through Devon Communities Together. The aim of the Forum is to work with communities and individuals to harness local resources and expertise, to help plan how to prepare, respond and recover from events such as flooding.

DCC has also set up a 'Property Level Resilience Grant Scheme' to help individual property owners be better equipped with the tools and basic defence measures they need to be able to deal with flooding. The Scheme enables home owners to apply for a grant of up to £5,000 to purchase and install resilient measures to reduce the risk of flood water entering their property. Once the grant is approved a survey of the property will be carried out to identify the required resilience measures, then the recommendations will be considered and relevant products will be purchased. Any additional budget required over the grant allowance is topped up by the property owner to maximise the level of protection to be gained.

3.3 Natural Flood Management

DCC is committed to the delivery of Natural Flood Management (NFM) initiatives and will continue to endorse such measures, either as stand-alone projects or as an integral element of relevant capital flood improvement schemes. It is recognised that NFM may take several years to provide the level of desired benefit and will need continued support from the landowners through their farm practices to achieve the desired outcome; however, the inclusion of such measures will enhance any hard engineered solution and help to maintain the intended standard of protection in the light of climate change.

A partnership approach with other RMAs and interested bodies, such as the North Devon Biosphere Reserve, Dartmoor National Park Authority, Devon Wildlife Trust and Westcountry Rivers Trust is essential for delivering NFM on the ground and has resulted in a number of pilot projects at Ottery St Mary, Ivybridge and Braunton.

4. The Role of Other Risk Management Authorities and Collaborative Working

As reported to the Place Scrutiny Committee in 2016, there is a particular concern over the resources available at District Council level for the delivery of their flood risk management and land drainage functions. Given the financial pressures on all RMAs, there is a pressing need to review the opportunities for collaborative partnership working and sharing of resources. In order to better understand the current focus on flood risk management and the level of resource available to all RMAs, a brief questionnaire was compiled and circulated on behalf of this Scrutiny Committee. The responses provided by each of the RMAs have been reviewed and a simple outline of their available resources summarised below. A full collation of these responses has been compiled as a separate document, which is available on the DCC website at: https://new.devon.gov.uk/floodriskmanagement/who-is-responsible-for-local-flood-risk-management/

4.1 Resources

The table below outlines the resources available at each of the RMAs and the budgets provided for carrying out any activities relating to drainage and flood risk management. Whilst direct comparison between the reported figures must be undertaken with some caution, given difference in staff structures and roles and their associated budgets, it does illustrate very significant variation between RMAs and the low level of support available for individual or collaborative working with some of these. This does raise significant concern about the collective ability of RMAs to support a robust approach to flood prevention and resilience across Devon, particularly given that local contributions will often be required when drawing down external funding through the 'local levy' or national flood grant-in-aid.

Authority	No. of FTEs	Annual Revenue Budget	Annual Capital Budget
East Devon DC	3	£305,000	£1,494,000
Exeter CC	0.5	£75,000	NIL
Mid Devon DC	0.2	£25,000	£50,000
North Devon C	0.05	£1,100	NIL
South Hams DC and West Devon BC	4	unconfirmed	unconfirmed
Teignbridge DC	1.3	£125,000	NIL
Torridge DC	0.1	£1,500	NIL
DCC – LLFA	7 +1.5 temp	£1,190,000	£400,000 plus Defra funding and Local Levy
DCC – Highways	75 based on 15% of total resource	£4.35 million	£1.1 million
Environment Agency	FCRM=54 Operations=104 (Devon, Cornwall & Isles of Scilly)	£4.7 million	£21 million
South West Water	Asset Planning = 3.1 Operations = 0.5 plus support from 9	A capital budget of £3m is currently allocated by SWW to mitigate flood risk from hydraulic overload	
Highways England	2	£2.8m	£12.8m
Braunton Internal Drainage Board	NIL return (Annual Reports for IDB indicate circa £10,000 for income/expenditure)		

The number of FTEs shown above, according to the RMA responses, is unlikely to see much change in the foreseeable future. A concern was raised by Teignbridge District Council that they were struggling to fill their full time Drainage & Coastal Manager position; they have recently secured a replacement officer, but at the expense of DCC's own dedicated team. This does illustrate a general concern about the difficulty of recruiting suitably experienced and qualified staff, especially those with the required engineering skills relating to flood risk and drainage.

4.2 Use of Flood Risk Legislation and Collaborative Flood Improvements

The legislation for Flood Risk Management was drawn together into the Flood and Water Management Act 2010, but the Land Drainage Act, Public Health Act, Highways Act, Water Resources Act and Water Industries Acts, amongst others, are also frequently used and provide powers to the different RMAs. The main issue of concern, however, is that most of the responsibilities, particularly for second tier local authorities, are in the form of powers, rather than duties, and are only used if the RMA elects to do so. The level of resource for such activities is, therefore, a reflection of the perceived need and political will of that authority. It is also worth noting that it is only these district and unitary authorities that have powers to carry out works on ordinary water courses; on this basis, DCC can only act in this manner when doing so on behalf of such authorities, requiring appropriate notification and agreement. It was due to these issues and limitations that the decision was taken to undertake a review of the current activities and resources of all RMAs for flood risk functions through a questionnaire survey in September / October this year.

The responses provided through this exercise highlight the disparity across Devon RMAs. Generally, those bodies with statutory obligations exceed the required, minimum level of service by proactively investigating, developing and implementing flood improvements, as well as offering advice and guidance to the public, businesses, other RMAs and third party organisations. It is clear, however, that the level of service provided by the eight second tier local authorities does vary significantly. Whilst all authorities indicate a willingness to cooperate through collaborative works with other RMAs, the level of input each provides is very much reflective of the available resources that they have elected to provide for this function. Regardless, the Devon Operational Drainage Group has been effective in providing a means for cooperation, sharing of information and collaborative working between all RMAs and is, generally, well attended by their representatives.

All RMAs are aware of the need to incorporate NFM measures, wherever possible, when considering flood improvements and efforts have been made to share best practice and case studies on those measures that are being implemented in Devon. Based on the responses of the questionnaire not all authorities are actively engaged in delivering NFM; however this is due to the low level of flood risk management activities being progressed and the resource available to that authority.

The picture is similar in relation to proactive planning of annual work programmes for drainage and flood risk. Some of the smaller District Councils with limited resources do not maintain an action plan and may only input to flood schemes delivered by others; others develop schemes in an *ad hoc* manner, progressing these through Defra's 6 year programme or the LLFA's Action plan, as and when they become a local concern and attain the necessary profile and priority. The upper tier RMAs, including the EA, SWW, Highways England and DCC as the LLFA and Highway Authority, routinely maintain an Action Plan detailing the investment programme that is to be progressed over the term of the plan; these deal with priorities established through past flooding or identified through relevant studies a being at high risk of future flooding.

4.3 Surface Water Management for New Development

In 2015 the government chose not to enact Schedule 3 of the Flood and Water Management Act, which would have meant DCC becoming the Sustainable Drainage (SuDS) Approval Body (SAB) to approve, adopt and maintain SuDS features from new development. Instead, it revised existing planning guidance and processes, such that the LLFA would be a statutory consultee to the Local Planning Authority (LPA) on surface water proposals for planning applications relating to 'major development'. Despite the very limited resource provided by Government to support this approach, this service is being delivered effectively and good working relationships have developed between DCC and (other) local planning authorities in limiting and managing the risk of flooding from surface water for such development.

One of the main concerns with this process is the review of all other planning applications, for which the LLFA has no specific responsibility. Unfortunately, many of District Councils lack the necessary resource, in-house expertise or established systems to adequately check the drainage implications for such minor development. Neither is DCC resourced to provide such input on a routine basis, even though it faces an increasing number of requests for such support. Such limitations are evident in the responses to the questionnaire and represent a significant issue which requires further attention.

4.4 Incident response

All of the RMAs provide some form of out-of-hours service, usually through a standby system. These systems are intended to contribute to a coordinated multi-agency approach in response to emergencies, such as flooding, in line with Local Resilience Forum plans and procedures. Past experience suggests that these arrangements work well for major storm and flood events, but there can be significant resource challenges, particularly where such events take place during public holidays such as Christmas.

The questionnaire response was positive in relation to the provision of resource to carry out site reconnaissance during or immediately following a flood incident. This process is essential to the multi-agency response, the subsequent flood investigation and the prioritisation and design of future works. Given staffing limitations, it is recognised that priorities may need to be changed at short notice to gather this essential information. There is also a need for better joint planning of such work and improved systems for reporting.

The provision of sandbags is ad-hoc across the authorities with many not offering this service and those that do are considering ceasing this non-statutory function. There is a growing reliance on community self-help in this regard, with advice and practical support now available through the Devon Community Resilience Forum.

5. Consultations/Representations/Technical Data

The information detailed in Section 4 of this report was gathered through a questionnaire survey issued to all Devon RMAs during September / October 2017. The full results are presented on the DCC web site at: https://new.devon.gov.uk/floodriskmanagement/who-is-responsible-for-local-flood-risk-management/ .

6. Financial Considerations

Funding for flood risk management activities is available through various local and national sources. The larger capital works are generally funded through Defra's Flood Defence Grant in Aid (a 6-year national funding programme); however, this usually has a requirement for local partnership contributions, often derived from the 'Local Levy, DCC's flood risk and highway drainage budgets, contributions from other RMAs and, where relevant, from

individual businesses or individuals who benefit from such schemes. More minor schemes are usually be funded by the relevant RMA, or supported through these other local sources. Other flood risk management and drainage activities are funded by the revenue budgets held by relevant RMAs, some of which derive, partially, from central government funding.

This report addresses the resources devoted to flood management and drainage by Devon RMAs, highlights some of their limitations and their variability across the county. Although not making any specific recommendations on future resources, it does highlight the desirability of increased cooperation and collaboration between RMAs.

7. Sustainability and Equality Considerations

There are no specific sustainability considerations linked to this report. However, DCC routinely addresses the environmental, social and economic impacts of its flood improvement schemes and programmes through its Impact Assessment process. In addition, Strategic Environmental Assessment is used to support the implementation and review of the Local Flood Risk Management Strategy. This is evident from the increased priority given to natural flood management and community resilience initiatives.

8. Legal Considerations

All of the new legislative responsibilities under the Flood and Water Management Act are being adhered to by the County Council in its role as Lead Local Flood Authority. The report also highlights some of the statutory duties and powers of other RMAs.

9. Risk Management Considerations

Flooding represents a major risk for communities, businesses and individuals across Devon, with such risks predicted to become more severe in response to climate change. Our ability to manage such risks is highly dependent upon the resources made available for this purpose through all RMAs. It was in this context that the questionnaire survey was undertaken and this report prepared in order to highlight the current level of resource and service available through Devon RMAs.

10. Conclusion

The resource available for flood risk activities across most RMAs is significantly constrained, with many having been subject to reductions in recent years. There is particular concern at District Council level, where some authorities have reported significantly less than 0.5 FTE dedicated staff to carry out this function. In this current climate of reduced budgets and limited resources, it is essential for authorities to pursue opportunities for collaborative partnership working to ensure much needed flood improvements can be delivered across the County.

In the light of these pressures, the Corporate Infrastructure and Regulatory Services Scrutiny Committee has a particularly important role in monitoring the collective contribution to and achievement of the objectives set out in the Devon Local Flood Risk Management Strategy. This should include ongoing scrutiny of all Devon RMAs, in line with the statutory provisions of the Flood and Water Management Act. In this context, it would be prudent for the Committee to consider how this role might continue to be exercised, beyond this current review.

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Head of Planning, Transportation and Environment

Electoral Divisions: All

Cabinet Member for Community, Public Health, Transportation and Environmental Services: Councillor Roger Croad

Chief Officer for Communities, Public Health, Environment and Prosperity: Dr Virginia Pearson

Local Government Act 1972: List of Background Papers

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	Background Paper	Date	File Reference
1.	Pitt Report	June 2008	http://webarchive.nationalarchives.gov.uk/20100812084907/http://archive.cabinetoffice.gov.uk/pittreview/_/media/assets/www.cabinetoffice.gov.uk/flooding_review/pitt_review_full%20pdf.pdf
2.	Flood and Water Management Act	2010	https://www.legislation.gov.uk/ukpga/2010/29/contents
3.	Flood Risk Regulations	1999	http://www.legislation.gov.uk/uksi/2009/3042/contents/made
4.	Devon Local Flood Risk Management Strategy	June 2014	https://www.devon.gov.uk/floodriskstrategy
5.	Communication Strategy	June 2014	https://www.devon.gov.uk/floodriskstrategy

Glossary (for Report and Appendix)

DEFRA	Department of Environment, Food and Rural Affairs
EA	Environment Agency
FDGiA	Flood Defence Grant in Aid
FTE	Full Time Equivalent
FWMA	Flood and Water Management Act 2010
LLFA	Lead Local Flood Authority
LPA	Local Planning Authority
PLR	Property Level Resilience
PFRA	Preliminary Flood Risk Assessment
RFCC	Regional Flood and Coastal Committee
RMA	Risk Management Authority
SuDS	Sustainable Drainage System
SWMP	Surface Water Management Plan

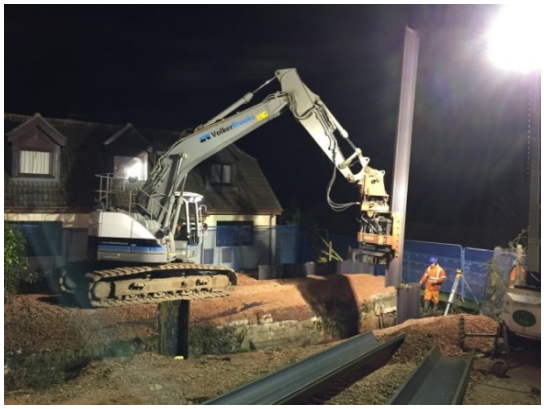
Appendix A
To PTE/17/63

Progress of Flood Improvement Projects by DCC – October 2017

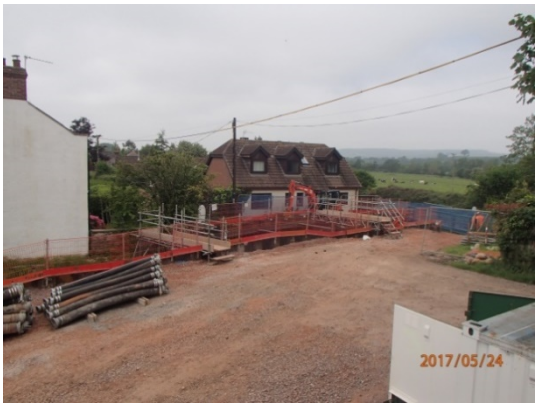
Axminster – A report was submitted to DCC Cabinet in December 2016 which gained their approval and support for delivering a scheme, originally estimated to cost c.£1million, funded by Defra FDGiA, Local Levy and contributions from DCC and East Devon District Council.

Following the successful completion of phase 1 works in 2016, which included a new flood defence wall and downstream channel widening, the second phase of the project, to upsize the existing arched culvert and to encapsulate the watercourse, is now complete. The overall scheme will have cost almost £1.3m and will reduce the risk of flooding to 161 properties.

The works have been very challenging working in the rear garden very close to the building and also adjacent to the railway; however, all potential risks were overcome and the works have gone well. Unfortunately, the strict requirements from Network Rail did escalate the risks and the associated costs for dealing with these, which account for the increased cost of the scheme.

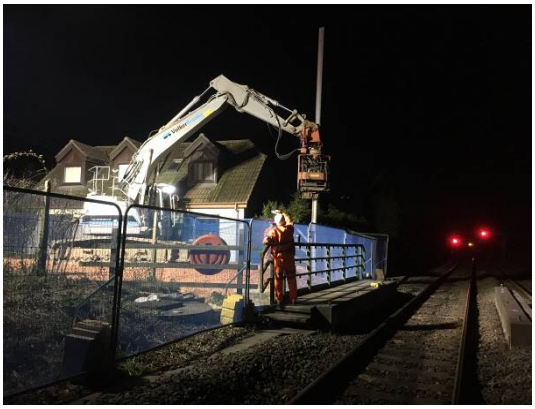


i. Axminster night Working



ii. Tight compound area

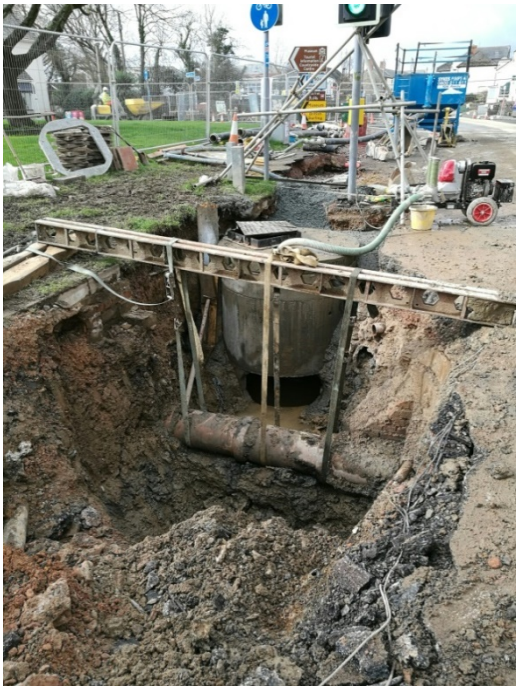
iii. New culvert under construction

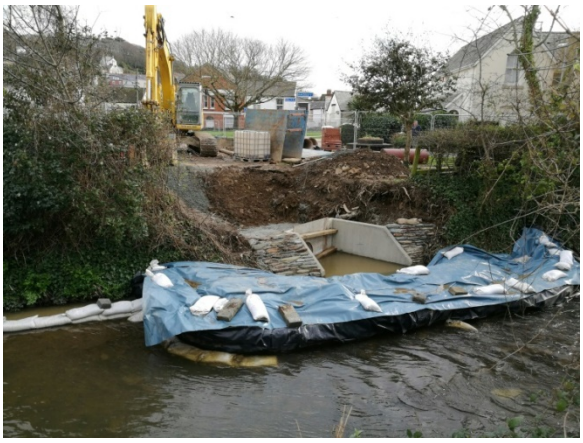


iv. Working close to Network Rail assets

Braunton – Phase 1 of the Braunton Flood Improvements, to upgrade the drainage within Caen Street, was completed prior to the Easter break of 2017. Despite concerns with the duration of the road closure and the potential impact on the businesses, there were no major issue during this period. The works had to deal with a plethora of underground services, which caused a challenging design and further issues on site, with new services emerging during excavations due to inaccurate records from service providers.

v. Drainage works in Caen Street


vi. Dealing with existing services


vii. New outfall into River Caen

A new dual headwall has been constructed to discharge the new drainage system and proposed pumping station outlet into the River Caen. This supersedes the existing outlet, where the invert was actually set below the current bed level of the river.

Costs of phase 1 exceeded £300k, funded by £58k Defra, £30k Local Levy, and over £200k from DCC.

Braunton - Phase 2 of the Braunton Surface Water Flood Improvements is now underway, which is to provide a pumping station to increase the standard of protection up to the 1 in 50 year level, funded mainly by £190k from DCC with a top-up of £25k Local Levy

The pumping station to be installed is a dual pump packaged plant and, in order to create the stable void for installing the unit, a shaft has been sunk. The main contractor, MacPlant, appointed Delta Civil Engineering to install the 3m diameter 6m deep shaft, as seen below. These works were completed successfully and the next element is to install the connecting pipework from the recently installed gravity drainage system and to the outfall within the new headwall

viii. Excavations for pumping station

ix. Lowering shaft for housing pumping station

In partnership with DCC Highways, the contractor will also be carrying out alignment improvements to the car park entrance. This will benefit from the current closure period and also reduce mobilisation and preliminary costs. All works are scheduled to be completed by 1st December to minimise disruption for the businesses in the run up to Christmas and their festive activities.

Braunton Natural Flood Management Pilot - A number of natural flood management measures have been installed on and alongside the Acland Stream where it approaches Braunton; these aim to reduce runoff and slow the flow. They include leaky dams and the replacement of lost hedges, as well as improved farming practices.

An initial baseline was derived with the installation of flow monitors on the stream and the net result of the interventions will be assessed over a period of time once completed.

x. Creation of buffer strip at field boundary

xi. Creation of new hedgebanks

Modbury Flood Improvements - The final scheme design has now been completed, along with all required modelling and assessment work; planning permission has also been approved by South Hams District Council. Upon completion, the improvements will aim to raise the standard of protection for 50 residential and 32 commercial properties to the 1 in 100 year standard. The works have been priced at just over £900k inclusive of contingency and funding approval for £435k Defra FDGiA and £100k Local Levy has now been received through the Environment Agency's internal processes. This is supported by an additional £250k from DCC, £100k from South West Water and £50k from South Hams District Council.

DCC is proposing a number of improvements at various locations upstream of the town to reduce runoff, attenuate flows and restrict the residual flows through the built up area. The main elements of the scheme are:

- Constructing three earthworks bunds to create flood storage within existing green areas of Modbury. These will capture and restrict flows to the town by temporarily storing excess water. The water will then be released slowly once the water levels drop.
- Excavating a series of cut-off ditches around field boundaries to reduce flows and direct flows to where they will be managed by the earthworks bund.
- In addition, modifications will be made to upstream watercourses, improvements to gullies and drainage and minor surface re-profiling to direct water away from properties.

The Contract is now out to tender and final arrangements are being put into place, such as land access and legal agreements. It is envisaged that the successful contractor will be appointed in December, with the aim of starting construction early in the New Year. Due to the timing of construction, the scheme will straddle two financial years. It is likely that the majority of FDGiA and Local Levy will be claimed in the year 2018/19, when the final benefits of the scheme are fully realised.

Ivybridge, Stibbs lane - The scheme business case and detailed design of the engineering works are currently in preparation and will be completed shortly. Subject to the relevant approvals being given, it is anticipated that works will commence in February 2018 and will continue into the following financial year. A percentage of the FDGiA will be claimed in 2018/19.

In addition to the engineering works, Natural Flood Management measures are also to be delivered in the upper catchment, which lies within the boundary of Dartmoor National Park. We will be working in partnership with the EA to include this element of the project within their 'Dartmoor Headwaters Project', which has received over £800k of Defra funding through the NFM initiative. A business case has been drafted and will be submitted to the EA for inclusion in the bid to draw down the grant funding.

Property Level Resilience - A new Property Level Resilience (PLR) Grant Scheme has been set up by DCC to help support individual property owners with funding towards resilience measures to protect their properties. The scheme has been approved by Cabinet and was publicised and opened for applications earlier this year. It is similar to the grant scheme previously offered by Defra as part of the recovery package linked to flood events. It will provide up to £5k per property to include for detailed survey to identifying required products and the balance towards provision of these resilience measures. There is currently a £50k per year allocation through Defra's 6 year FDGiA programme, which will be matched by DCC and supported by £10k per year from the SWRFCC's Local Levy. It is hoped that over 25 properties will benefit from this initiative each year, until 2021 or beyond.

The first batch of applications resulted in 11 properties being offered a survey to understand the need for PLR; a further 4 neighbouring properties have also been included, after being contacted by DCC. These surveys have now been carried out, highlighting the products/works required to make the properties more flood resilient. Property owners will arrange for the products to be installed based on the recommendations of the surveys.

A further 5 properties are now being included following the second batch of applications being reviewed.

DCC is also looking to roll out a number of PLR measures to vulnerable properties in Exeter, through a separate partnership with Exeter City Council.

Stokeinteignhead - The final modelling exercise and options assessment for the proposed Stokeinteignhead Flood Alleviation works has now been completed. The report has identified that storing water in the upper catchment is the most beneficial option in terms of reducing the risk of flooding. DCC's in-house Engineering Design Group is now busy developing the proposal for two water storage areas (one on the eastern catchment and one on the southern catchment), to take it to outline design and to a point where a planning submission can be made. This process is supported by specialist investigations, including geotechnical investigations, landscape assessment, ecological baseline studies and historic environment desktop study. Ground water monitoring and detailed design of the storage areas are both ongoing and works remain on target for commencement in late summer 2018.

Uplyme – Minor works to improve culvert inlets and silt traps have been completed. We are now working with DCC highways and East Devon District Council to develop a flood improvement scheme to upsize the existing watercourse culverts. It is proposed for works to commence on site in early 2018, subject to a successful business case submission.

Ugborough - A catchment study is underway to understand the various sources of flooding and level of risk to the community. The study has been extended to incorporate an additional flood location brought to our attention by a concerned resident.

Other Flood Improvement Schemes
Studies, investigation and scheme proposals are also being developed at Chillington, Cullompton, South Pool, Beeson, Broadhempston, Sidmouth, East Budleigh, Lympstone, Exeter, Ottery St Mary, Bideford, Dartmouth, Kingsbridge and Barnstaple. All of these are at different stages and will continue to be developed over the coming months/year.