

SRA Enhanced Programme 2019-20				Appendix 2a 2019-20 Enhanced Programme List – Public version – no costs
Title	Outline of Scheme/Activity/Action	Addition al £s or new work	Delivery Date mm/yy	Objectives, Outcome & Benefits
Hills to Levels - Land Management and NFM to Slow the Flow	Employing nature-based and land management solutions to local flooding in upper catchment affecting villages, houses, highways and to contribute towards solving catchment scale flooding in Tone, Parrett, West Somerset Streams, Brue, Axe and Somerset Frome. 1. Design and implementation of 30 small-scale and natural flood management capital works to detain water in the upper catchment and reduce peak flows. 2. Increase uptake of soil management techniques and cropping changes which improve the infiltration of water and reduce run-off across approximately 50 farms. This includes split field trials, soil husbandry reports and workshops. 3. Respond to 50 highway flooding and LLFA referrals where land management can help provide a solution. 4. Operate a second reverse auction in 2019/20 to deliver enhanced land management changes and engage more land managers. 5. Modelling at sub-catchment scale to demonstrate the effectiveness of the NFM measures that have already been installed.	New	Mar-20	Objectives: • Reduce the depth and duration of flood events in Somerset • Reduce local flash flooding in the upper and mid catchment areas • Reduce number and severity of highway flooding incidents • Build natural capital potential through improved soil structure and soil management • Deliver multiple environmental benefits alongside flood risk reduction • Engage increasing number of landowners and farmers in reducing run-off from their land • Promote whole catchment approach to flood risk management • To reduce sediment loading in dredged profiles Outcomes: Reduced soil loss and water flow from the upper catchment Delay to flood peaks in sub-catchments Fewer local flooding incidents More farmers/landowners reducing flood risk on their land Benefits: • Reduced soil loss in the upper catchment should reduce the need for de-silting in the lower catchment • Reduced spending by LHA on solving flooding problems and clear up after incidents • Beneficial land management works will decrease rates of overland flow that result in local flooding • Increasing infiltration and reduce water run-off will reduce flow levels
Co-Adapt EU Project Somerset	A contribution of 40% match funding to enable Somerset partners to participate in Co-Adapt, if a final bid to the EU's Interreg 2 programme is successful before the end of March 2019. The aim of Co-Adapt is to investigate and try out ways of engaging Somerset residents in planning for long-term adaptation to the impacts of climate change. The main partners locally are FWAG SW, Somerset Wildlife Trust, Somerset County Council, the National Trust and Devon County Council (as the accountable body for the Blackdown Hills AONB Partnership). Much emphasis is placed on what the EU calls co-creation, which means people and organisations working together.	New	Jun-22	Objective: In Somerset, Co-Adapt will invest in the development, testing and rolling out of approaches to the co-creation of nature-based solutions that improve people's capacity to adapt to the water-related effects of climate change. Somerset will become more flood (and drought) resilient. Outcomes – Somerset Levels: In 2014, 150km2 of the Somerset Levels and Moors flooded. The cost to the whole county was up to £147.5million. The aim of Co-Adapt is to explore sustainable approaches to flood protection and alleviation. More Land Trusts and Moor Associations will be encouraged, following up on work funded by the SRA, eg on West Moor. Co-Adapt investments will result in: • 2500 hectares on the Somerset Levels being better adapted for flooding and drought, with improved accessibility to five moors and three structures adapted to deliver more naturally functioning water management with less reliance on traditional engineering techniques. • An adapted water management regime on 1500 hectares to manage flooding using natural processes rather than pump drainage, saving €200,000+ in a major flood event. This will significantly reduce the current total costs of flood and drought management in the pilot area. • Monitoring equipment will be placed on adapted water management structures to measure their effectiveness in delivering water management.
Cheddar Study	A study into flood risks in the Cheddar Gorge area. After flooding in November 2017, the B3135 through the Gorge was closed for a week while rocks and debris were removed and the road was repaired. The aim of this study is to identify measures which could be taken by the SRA and its partners to safeguard properties, businesses and a very special part of Somerset. Landscape and environmental designations include Mendip Hills Area of Outstanding Natural Beauty (AONB), Special Area of Conservation, and Site of Special Scientific Interest (SSSI).	New	Mar-20	Objectives: Identify works to: • Reduce flood risks to properties and businesses, and/or increase their resilience. • Reduce the frequency and duration of closures to the B3135 and prevent damage to infrastructure.
Pioneer Dredging River Parrett – Oath to Burrowbridge	Work on detailed plans for pioneer dredging between Oath and Burrowbridge began in January 2018. Most of the funding for this scheme is coming from the Heart of the SW Local Enterprise Partnership. As planning for the scheme has progressed, and more detailed information obtained, it has become apparent that the scheme will cost more than originally planned. An SRA contribution will enable works to proceed and desired outcomes to be achieved. Dredging this stretch will also tie in with the SRA's proposed enhancement scheme for the River Sowy (created in 1969-72 as the Parrett Flood Relief Channel) and King's Sedgemoor Drain.	New	Dec-19	Objective: Dredge the River Parrett between Oath and Burrowbridge. Benefit: Computer hydraulic modelling indicates that dredging between Oath and Burrowbridge will reduce flood risks to just over 40 square miles of land in the Parrett catchment, and benefit 200 properties. Outcome: Dredging this stretch will also tie in with the SRA's proposed enhancement scheme for the River Sowy. Together, the two schemes will create possibilities for greater operational flexibility in the management of flood water.
A38 Blackbird Bends, Nr Wellington, Flood Alleviation Study	A study of the catchment upstream of the area around Blackbird Bends on the A38 near Wellington, to identify works that will reduce the risks of flooding along this busy and important road. In 2017-18 the SRA funded drainage improvements on the A38 nearby at Rumwell, and in 2018-19 a new drainage pipe was installed for the SRA across the A38 near Chelston. This study will investigate what more can now be done. The A38 is one of Somerset's busiest roads, used by more than 17,000 vehicles every day. Also, if the M5 is closed, the A38 is used as a diversion, so it is important to keep it open.	New	Mar-21	Objectives: • Study the catchment area immediately upstream of the Blackbird Bends. • Identify works and measures to reduce flow reaching the area around the Blackbird Bends. • Assess methods of getting water under the A38, including engineering costs and any costs for diverting services. • Model flows and impacts downstream of any proposed schemes. • Mitigation of any increased flows downstream. Outcome: • Identify a flood prevention/reduction scheme(s) at the A38 Blackbird Bends. Benefit: • Keep open the A38 and prevent local businesses being flooded.
Countywide Enhanced Drain Jetting	The SRA funds pro-active drain jetting at places known to be highly susceptible to flooding to help ensure that highway drainage systems are kept fully operational. Drains are otherwise only jetted by Somerset County Council on a reactive basis: that is, once they have become blocked. Pro-active jetting is designed to stop drains from getting blocked in the first place, by removing silt and debris. The aim is to keep roads open during times of flood.	Additio nal	Mar-20	Extra SRA-funded drain jetting targets places across Somerset at high risk of flooding. It is part of a six-pronged attack on highway flooding problems, along with gully-emptying, de-silting of structures, targeted edge of road clearing, silt-trap emptying and the Hills to Levels system of highway referrals to reduce run-off from land onto roads. These works reduce annoyance and inconvenience for residents, businesses and visitors. Together they help to keep roads open, make them safer, preserve access for communities, and safeguard properties from flooding. Extra SRA-funded drain-jetting began in 2016-17. It enables problems to be addressed before, not after.
Yeovil Urban SuDS Study	A study into how surface water flooding 'hotspots' in Yeovil could be tackled through the use of Sustainable Urban Drainage Systems (SuDS). Carefully placed and well-designed SuDS can also offer local people recreational and educational opportunities, and benefit wildlife and the environment.	New	Mar-20	Objectives: • Identify potential locations for SuDS to address surface water flooding problems and provide other benefits (recreational, educational, and environmental). Outcomes: • List of areas prone to surface water flooding. • List of viable site-specific SuDS schemes, with design concepts. Benefits: • A more comprehensive, efficient and cost-effective approach to surface water management. • Raised public awareness of flooding issues in Yeovil. • Recreational, educational, environmental and biodiversity benefits.
Countywide Enhanced Gully Emptying	Gullies in the highest flood risk areas are cleansed once a year by Somerset County Council. SRA funding supports an enhanced cleansing regime. It allows 24,000 high risk gullies to be given an extra mechanical cleansing every year.	Additio nal	Mar-20	Extra SRA-funded gully emptying targets places across Somerset most susceptible to flooding. It is part of a six-pronged attack on highway flooding problems, along with drain jetting, de-silting of structures, targeted edge of road clearing, silt-trap emptying and the Hills to Levels system of highway referrals to reduce run-off from land onto roads. These works reduce annoyance and inconvenience for residents, businesses and visitors. Together they help to keep roads open, make them safer, preserve access for communities, and safeguard properties from flooding. Extra SRA-funded gully emptying began in 2016-17. It now enables around 24,000 of the highest risk gullies to be emptied twice a year as opposed to once.
Countywide Enhanced Silt-trap Emptying	Somerset has around 80 silt-traps (not including cattle grids). Across all districts, they help to reduce flood risks. Some silt-traps are so valued locally they were originally paid for by parish councils (for example, at Barrington). Extra SRA funding will help to stop silt traps getting blocked, and so also help to stop roads flooding and deteriorating.	Additio nal	Mar-20	Extra SRA funding will enable silt-traps to be emptied so that they continue to work as they should. Silt washed out from land near roads will be collected and stopped from blocking highway drainage systems. Countywide Enhanced Silt-trap Emptying is part of a six-pronged SRA attack on highway flooding problems, along with drain jetting, de-silting of structures, targeted edge of road clearing, silt-trap emptying and the Hills to Levels system of highway referrals to reduce run-off from land onto roads. These works reduce annoyance and inconvenience for residents, businesses and visitors. Together they help to keep roads open, make them safer, preserve access for communities, and safeguard properties from flooding.

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Preston Brook, Yeovil Enhancement Implementation Scheme	The aim is to create a flood attenuation pond and wetland area in the grounds of Preston Academy. This proposal stems from a feasibility study funded by the SRA in its 2018-19 Enhanced Programme. The purpose of this study was to look at ways of introducing natural flood management techniques to an urban area. The Preston Brook project is being led by the Farming & Wildlife Advisory Group SW, using Yeovil Rivers Community Trust for delivery. Flood attenuation and environmental benefits will accrue along Preston Brook downstream of the new feature at Preston Academy, to Tith Court and Century Park. Around 60 homes and 10 commercial properties are expected to enjoy reduced flood risks.	New	Mar-20	<p>Objectives:</p> <ul style="list-style-type: none"> Design and construct a multi-function surface water feature which has the primary objective of providing flood alleviation for areas downstream of the site but also aims to improve water and habitat quality, biodiversity and enhanced recreation and educational resources. Use the finished project as a fully-evidenced "model" to help design and implement future urban projects. <p>Outcome:</p> <ul style="list-style-type: none"> An effective design which achieves its objectives and can form the basis for future projects. <p>Benefits:</p> <ul style="list-style-type: none"> Effective flood alleviation and enhanced resilience to climate change. Use of the "model" approach will save time and money, and establish and maintain partner networks. Raised public awareness of flooding issues.
Countywide de-silting of Structures	A programme of de-silting bridges and culverts, and re-aligning channels next to highways structures, to improve ways that watercourses can flow, and increase the volumes of water they can carry. De-silting structures reduces flood risks to roads, land and properties. Sites that would benefit from de-silting are identified by Somerset County Council's highways department through the use of records kept by local highways officers, or concerns raised by other authorities or members of the public. SRA funding is required as de-silting structures is not done as a routine operation by Somerset County Council.	Additional	Mar-20	Silting-up is a problem because it can damage structures such as bridges and culverts, and cause flooding. De-silting increases the flow of water through bridges and culverts and reduces the risk of structural damage caused by pressure, or by floating debris colliding and getting stuck. De-silting also cuts the risk of flooding on roads and in nearby properties. It removes watercourse "bottle necks" allowing whole systems to work more efficiently. It is part of a six-pronged SRA attack on highway flooding problems, along with drain jetting, gully-emptying, targeted edge of road clearing, silt-trap emptying and the Hills to Levels system of highway referrals to reduce run-off from land onto roads. SRA funding for desilting of structures began in 2016-17.
Taunton Strategic Flood Alleviation Improvements Scheme - Local Interventions	This major scheme is now moving towards the design of various local measures to reduce flood risks in Taunton town centre, and the submission of a planning application for the construction of these works. Actions being worked on are: 1. Vivary Park, Sherford Stream Improvements. 2. Raising bridges on Mill Stream by Castle Street. 3. Mill Stream flow diversions by French Weir. 4. Optimisation of Long Run meadow storage, upstream of French Weir. 5. Conveyance improvements (particularly considering culverts) on Galmington Stream near Parkfield Drive. 6. Bathpool options - a) Closing Canal Route at Firepool b) Railway Culverts between Obridge and Bathpool c) Flood Relief Channel at Bathpool parallel to Hyde Lane area d) Over-pumping at Old River Tone Outfall by Bathpool Bridge e) Old River Tone Flap Valve Bund by Bathpool Bridge. The aim of these local improvements is to increase Taunton's capacity to deal with flood threats, pending delivery of the two main elements in the overall strategic scheme: the creation of a large flood water storage area upstream, and the raising of flood defence walls in the town. The scheme is led by Taunton Deane Borough Council and the Environment Agency, and backed by the SRA as a key project for Somerset.	Additional	Oct-19	<p>Objective:</p> <ul style="list-style-type: none"> Reduce flood risks to Taunton and (where possible) its wider catchment. <p>Outcome:</p> <ul style="list-style-type: none"> The design of a series of local interventions to reduce flood risks in Taunton and the preparation and the submission of a planning application for these improvements. <p>Benefit:</p> <ul style="list-style-type: none"> Greater protection for Taunton against flooding while work continues on developing a long-term strategy - and securing funding - for major features such as an upstream storage area and raised flood walls in the town centre.
Countywide 'Targetted' Road Edge Cleaning	Mechanical brushing of the edge of roads at places across Somerset known to be highly susceptible to flooding. Sites must meet one or more of the following criteria: • Located within defined county flood zone • Aligned with highest-risk annual gully-emptying round • Linked with SRA-funded Enhanced Drain Jetting location SRA funding enables roads to be swept which would not otherwise be swept. The programme is dynamic, because of inherent variabilities. Roads, particularly rural roads, are not uniform: they narrow, they widen; they dip, they rise; in some years more debris accumulates than in other years. So these works have two big unknowns – the amount to be collected, and the time it will take. Unpredictability means that costs have to be monitored week-in week-out, so it is impossible to publish in advance a definitive list of places that will be visited. Generally, however, experience suggests that more than 30 miles of roads will be brushed, and more than 600 tons of 'arising' collected.	Additional	Mar-20	<p>Objectives:</p> <ul style="list-style-type: none"> The effectiveness of highway drainage systems is severely impeded by the accumulation of debris and detritus, with resulting localised flooding. Brushing road edges at targeted locations offers safety benefits to highway-users as well as preventing future clogging of highway drains. Road sweeping in rural areas began in 2016-17, funded by the SRA. <p>Outcomes:</p> <ul style="list-style-type: none"> Leaves and other large debris will be prevented entering in to and covering the road gullies which would block the highway drainage system. <p>Benefits:</p> <ul style="list-style-type: none"> Highway drainage systems will be operational in times of flooding
Mendip Enhanced Maintenance Works	A two-stage project designed to reduce flood risks. 1. A study of culverts in Mendip to identify ones which are not included in Mendip District Council's annual maintenance programme, and which need repair and improvement. 2. A programme of extra works targeting the highest priority culverts in flood risk areas.	Additional	Mar-20	<p>Objectives:</p> <ul style="list-style-type: none"> Identify culverts in Mendip that require remedial work (including culverts whose ownership is unclear). NB: This work will focus on areas and sites in Mendip not already covered by SRA-funded IDB and Somerset County Council Highways Department programmes. Develop a programme of works targeting culverts where the biggest flood risk reduction impacts would accrue. Undertake remedial works to culverts (possibly including the removal or replacement of structures). <p>Outcomes and Benefits:</p> <ul style="list-style-type: none"> Reduced risks of local flooding. Reduced risks of structures collapsing or failing. Improved conveyance of surface water through the surface water network. Reduced need for future reactive maintenance of culverts. <p>The study is likely to identify more works than can be funded with this allocation. This will provide a pipeline of schemes for future projects should funding be available</p>
CCTV Surveys of privately owned drains	SRA funding provides extra means to survey privately-owned culverts, so as to identify problems that can be taken forward by riparian owners or flood risk management authorities, and/or gather information to supplement flood investigations and asset data collection.	Additional	Mar-20	<p>Objectives:</p> <ul style="list-style-type: none"> Provide Somerset County Council, as the Lead Local Flood Authority, with extra means to survey privately owned culverted watercourses, so as to: Gather information. Identify blockages that have contributed to flooding, or could do so in future. Determine responsibilities for action. Provide evidence to support work with riparian owners to undertake remedial works under the Land Drainage Act.
Installation of 3 Silt-traps, Chard	Three new silt-traps in the Crimchard area of Chard (Reservoir Road, Catchgate Lane, Laurel Gardens) will help to stop the flooding of roads, protect properties and make driving safer. Around 60 properties will benefit.	New	Mar-20	<p>Objective:</p> <ul style="list-style-type: none"> Install three silt-traps. <p>Outcome:</p> <ul style="list-style-type: none"> Silt-traps prevent silt from entering and blocking highway drainage systems. <p>Benefits:</p> <ul style="list-style-type: none"> Highway drainage systems work better in times of flood. Roads are kept open and safer. Around 60 properties are better protected.
Sampford Brett Works	Sampford Brett, near Williton, has suffered numerous flooding problems over many years. Concerns currently focus on the maintenance and capacity of a 325m-long culvert; the build-up of silt at the outfall pipe on the Doniford Stream; and the build-up of silt in the Sampford Brett stream. SRA-funded improvements would include a CCTV inspection of the culvert, removal of silt at the outfall pipe, and de-silting of the Sampford Brett stream. A thorough programme of engagement with riparian owners is also being planned to ensure clarity and action over future responsibilities.	New	Jun-19	<p>Objectives:</p> <ul style="list-style-type: none"> Carry out a CCTV inspection of a 325m long culvert to identify blockages that have contributed to flooding in the area to reduce the risk of flooding and possible road closure. Remove silt and other debris within the culvert. Liaise with riparian owners to provide information on how best to maintain their section of the stream. <p>Outcomes:</p> <ul style="list-style-type: none"> Improved conveyance of water through the culvert. Identification of riparian owners and raised awareness of their responsibilities under the Land Drainage Act. <p>Benefits:</p> <ul style="list-style-type: none"> Reduced flood risk for around 30 houses and businesses. A reduction in the number of times the main road could be closed which is the main route into the villages of Capton and Vellow. Raised awareness of riparian responsibilities in the area.

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Moorland surface water and drainage improvements	A package of improvements tackling numerous surface water drainage problems in Moorland, following a thorough investigation by the Parrett Internal Drainage Board and Somerset County Council's Flood Risk Management Team and Highways Department. As Moorland has grown over the last 100 years, its drainage system has changed and people have lost awareness of issues such as the location and condition of parts of the drainage network, and who should be responsible for its maintenance. Intense rainfall has resulted in excessive water on roads, the internal flooding of at least one property along Northmoor Green Lane and the flooding of a small number of gardens and driveways along Church Road. SRA partners are now keen to fix various problems and to raise residents' awareness of their future responsibilities as riparian owners.	New	Mar-20	Working with Somerset County Council's Flood Team and Highways Department a package of improvements involving the local community has been identified. This includes a combination of maintenance and watercourse improvement works. Partners will also engage with the community, with riparian owners in particular, to raise understanding of responsibilities and the function of different aspects of the drainage network.
Wetland Biomass Feasibility Study	A feasibility study into the use of wetland biomass from the Levels and Moors using Somerset County Council's highway depots as a case study. Feasibility study could demonstrate an income stream from wettest and hardest to farm areas through generation of biomass fuel. Provides end use for wetland products arising from wettest areas of high environmental value in the Brue Valley and beyond. Exploring the increased use of wetland biomass was a specific action identified early on in the development of the Flood Action Plan. The action feeds into the aim of the SRA to support business confidence and economic growth.	New	Sep-19	Objectives: <ul style="list-style-type: none"> To use a real-life case study to assesses the viability of using wetland biomass for heat generation. Produce a feasibility report based on installing biomass boilers using wetland biomass in highway depots in Somerset. Outcome: <ul style="list-style-type: none"> Help to determine if the production of wetland biomass is a realistic commercial proposition. Benefits: <ul style="list-style-type: none"> If the study shows that the wetland biomass is commercially viable in this scenario, then it could lead to creation of new businesses and jobs on the Somerset Levels, provide alternative incomes for land owners, different land management methods, enhanced wildlife environment and provide a green, carbon neutral, environmentally friendly fuel stock negating the need for burning fossil fuels. If the report shows that wetland biomass of this type is not commercially viable at this stage it would show what shortfalls there currently are, and that further assistance is needed.
Installation of Silt-trap, Barrington	A new silt-trap on Bonnings Lane, Barrington will help to prevent flooding of the road, protect properties and make driving safer. Around 25 nearby properties will benefit. For the SRA, FWAG SW are also working with local landowners on measures to reduce run-off from nearby fields.	New	Mar-20	Objective: <ul style="list-style-type: none"> Install new silt-trap. Outcome: <ul style="list-style-type: none"> Silt-trap prevents silt from entering and blocking highway drainage systems. Benefits: <ul style="list-style-type: none"> Highway drainage systems work better in times of heavy rainfall and flood. The road is kept open and safer. Around 25 nearby properties benefit.
Highway SuDS Retrofit Trial	A project designed to show how Sustainable Urban Drainage Systems (SuDS) can be used to tackle problems with surface water and flooding on roads. SuDS have not been used enough in Somerset in highway situations, but there is increasing evidence from elsewhere that they compare favourably with traditional underground engineered solutions. One or more sites in Taunton Deane will be chosen. It is also planned to show how SuDS can improve water quality, provide new habitats for wildlife and make places more pleasant to live and work.	New	Mar-20	The SRA and its partners will learn useful lessons about SuDS, which will help to encourage and shape their future use. Issues include: <ul style="list-style-type: none"> The engineering suitability of SuDS for highway drainage, and what types of SuDS are best for this purpose. How the cost of SuDS compares with traditional drainage approaches. SuDS as a more climate-resilient approach to drainage. Additional benefits of highway SuDS compared with traditional drainage systems.
Remedial works to culverts under highways in IDB areas	The continuation of a programme that has involved the inspection of more than 700 culverts across Internal Drainage Board areas in Mendip, Sedgemoor and South Somerset. Culverts most in need of improvement have been identified, and the main aim in 2019-20 is to deliver three major structural repairs and a further programme of jetting, clearance, and timely maintenance to around 40 culverts. Periodic inspections will also be made to identify possible future problems before they happen.	Additional	Mar-20	All culverts are vulnerable to possible blockages from debris and vegetation, and many were not designed to bear the heavy weights and rates of modern traffic. There is significant potential for water flow capabilities to be lost, through blockages or collapse. This would result in flooding to local roads, properties and land. This SRA-funded programme therefore picks out the most vulnerable and strategically important culverts for preventative maintenance and repair, to forestall the dangers of disruption to residents, drivers and landowners.
Non-Main River Restoration and Maintenance Works in Mendip	A two-stage project designed to reduce flood risks. 1. A study of all watercourses in Mendip (except for main rivers) to identify ones which are not included in Mendip District Council's annual maintenance programme, and would benefit from improvements. Such watercourses may have reduced capacity through poor maintenance, siltation or blockage and they may therefore pose flood risks to properties, land and roads. 2. A programme of extra works targeting the highest priority watercourses in flood risk areas.	New	Dec-19	Objectives: <ul style="list-style-type: none"> Identify watercourses that require clearance, maintenance and/or restoration (including those where ownership is unclear). Develop a programme of works targeting watercourses with the biggest potential impact on flood risks. Undertake remedial works to watercourses identified (possibly including Natural Flood Management measures, if appropriate). Outcomes and Benefits: <ul style="list-style-type: none"> Reduced local flood risks. Reduced risk of debris and silt being carried downstream to block structures. Improved conveyance of surface water through the surface water network. Reduced need for future reactive maintenance. The study is likely to identify more works than can be funded with this allocation. This will provide a pipeline of schemes for future projects should funding be available.
West Somerset Streams Maintenance	Parts of West Somerset lie in Rapid Response Catchments where flood waters can rise so quickly they endanger people's lives. In these areas, it is important to reduce flood risks <i>before</i> such threats arise. Small capital schemes and extra maintenance can make a big difference. SRA funding is therefore given for activities such as vegetation clearance and de-silting that could not otherwise be afforded.	Additional	Mar-20	Objective: <ul style="list-style-type: none"> Carry out vegetation clearance and de-silting works to identified watercourses in West Somerset. Outcomes: <ul style="list-style-type: none"> Reduced flood risks to people and properties and reduced flooding on roads. Less need for future reactive maintenance. Fewer localised flooding incidents. Benefits: <ul style="list-style-type: none"> Reduced flood risk to multiple communities in West Somerset, properties and agricultural land. Reduced number of times that total closure will occur on the A39 and A358 and many minor roads in the area. Maintenance of wildlife habitat.
Enhanced Maintenance of Land Drainage Assets in Sedgemoor	Historic land drainage and flood relief infrastructure across Sedgemoor will benefit from enhanced maintenance and improvements, particularly from early interventions to stop problems from building up in the future.	Additional	Mar-19	Additional SRA funding gives Sedgemoor District Council greater capacity to undertake works that deal with issues before they become problems, and to put in enhancements - such as telemetry - that make flood defence schemes and infrastructure more efficient. Several major, expensive schemes are progressing in Sedgemoor, but the district council and the SRA believe as a matter of policy that benefits also accrue from smaller schemes that deal with local issues for the benefit of different communities.
Community Flood Information Pilot Project	A pilot scheme centred around Martock in South Somerset and Roadwater and Carhampton in West Somerset, places known for their active involvement in matters to do with flooding. The aim is to try out means of setting up very localised early flood warning systems, through using smart, low-cost, low-maintenance devices at key locations identified by flood wardens, flood group members and residents. If this pilot exercise is successful, participants will be well placed to take on future responsibilities for the maintenance of systems and it is hoped other places will be keen to follow their lead.	New	Mar-20	Objective: <ul style="list-style-type: none"> Test approaches for increasing community resilience through better, more localised information about specific flood risks than can be provided through the Environment Agency's system of alerts and warnings. Outcomes: <ul style="list-style-type: none"> Two communities / groups of communities to benefit from localised early warning and information systems. Learning from the two pilots to inform further roll out. Benefits: <ul style="list-style-type: none"> Better information for local communities to support their Flood Warden and community resilience activities. Tested models to encourage engagement by other communities.
Woolston Moor Scheme	Woolston Moor is a hamlet in West Somerset with a Flood Alleviation scheme that badly needs fixing. Problems include silting up, possible culvert blockages or collapse, and the delamination (breaking up) of steep-sided watercourse walls. Proposed SRA-funded works include de-silting, CCTV inspection of a culvert 160 metres long, and watercourse wall repairs.	New	Jul-19	Objectives: <ul style="list-style-type: none"> To carry out a CCTV inspection along the length of the 160m culvert. To remove silt and debris through the culvert and carry out any remedial work to the sides of the watercourse at the entrance to the culvert. Outcomes: <ul style="list-style-type: none"> Improved conveyance of water through culvert. Reduced risk of localised flooding. Reduced risk of the sides of the watercourse collapsing. Benefits: <ul style="list-style-type: none"> Increased protection from flooding to approximately 10 properties and adjacent farmland.
Knapp Hill Catchment Feasibility Study	A study of flooding problems in the catchment of Knapp Hill on the edge of Wells. Two watercourses flow down towards the Bath Road, which floods regularly during periods of heavy rain. There are further issues with erosion, the possible undermining of small bridges and culverts and some flood risks to properties and public footpaths. SRA-funded CCTV surveys of culverts underneath the Bath Road and other assessments and reviews will help to identify key areas for improvements.	New	Dec-20	Objective: <ul style="list-style-type: none"> Identify the key risks to surface water conveyance through the Knapp Catchment. Identify improvements to watercourses and structures within the catchment to improve biodiversity, reduce flood risk and minimise erosion. Outcome: <ul style="list-style-type: none"> A detailed Options Appraisal report for the catchment which will form the basis of a future bid for funding to the SRA to complete the remedial works identified.

Title	Outline of Scheme/Activity/Action	Additional £s or new work	Delivery Date mm/yy	Objectives, Outcome & Benefits
Riparian Responsibilities Officer	This proposal would ensure the continuation of the SRA-funded Riparian Responsibilities Officer post beyond September 2019. The post allows a proactive approach to be taken to engaging communities about watercourse maintenance and riparian duties.	Additional	Mar-20	Currently not funded - there is sufficient budget remaining to fund the role to the end of the planned secondment period. The Riparian Responsibilities Officer will raise awareness of riparian responsibilities contributing to flood risk management whilst emphasising the environmental benefits of appropriate channel management. The proposal will support and enhance the work of the existing authorities as well as other community engagement initiatives. The officer's focus will be on the enabling aspects of the role, working with a range of stakeholders to positively deal with the issue of riparian responsibilities across the county in partnership with authorities holding land drainage powers. It is envisaged that the officer will support engagement work already undertaken with flood-affected communities and contribute to the outcomes of other SRA-funded projects.
Development of Asset Database	Lead Local Flood Authorities are required, under the Flood and Water Management Act 2010, to 'establish and maintain: (a) a register of structures or features which, in the opinion of the authority, are likely to have a significant effect on a flood risk in its area, and (b) a record of information about each of those structures or features, including information about ownership and state of repair'. The Act goes on to state that 'the lead local flood authority must arrange for the register to be available for inspection at all reasonable times'. Somerset's Lead Local Flood Authority is Somerset County Council (SCC). SCC's asset register fulfils statutory requirements. However, significant benefit for SCC and other SRA partners could be achieved if funding was available to move beyond the basic statutory requirements with a new database system that included a web map interface for authorities and the public to use.	New	Mar-20	Currently not funded - Whilst it was recognised this would be a valuable tool to have it does not score well against the FAP criteria. Combined with the relatively high level of contribution it was agreed that other projects should proceed in advance of this The aim is to develop a web-based interactive database/mapping system that would give members of the public, and SRA partners, a better view of information available about assets. Additional information about assets could also be reported. Positive initial discussions have been held with SRA partners. The project will contribute to better asset management and understanding of flood related structures. This will support programmes of maintenance, inform flood risk management strategies and flood investigations. All of which will result in enhanced flood and water management.
Curry Rivel School Drainage Improvements	This proposal relates to an ordinary watercourse that has been culverted both upstream and downstream of Curry Rivel Primary School. Culverting was done at different times, in different ways. A recent SRA-funded CCTV survey showed that the system is under capacity in various places. This means that exceedance flows travel over land instead, along the road and into the primary school.	New	Aug-19	Currently not funded - whilst it was recognised the scheme delivered localised benefits it did not score very well against the broader FAP criteria. It is possible it could be taken forward by Somerset CC in the future if funding is available. Improvements will be made to some culverted sections of watercourse in Curry Rivel to reduce flood risk and/or increase resilience for the primary school, properties and local roads (including Water Street). The project will complement work that Somerset County Council as the Lead Local Flood Authority has been taking forward in collaboration with the council's Highways, Property Services and Civil Contingencies sections, the SRA's Riparian Responsibilities Officer, Curry Rivel Parish Council and the primary school to explore this flooding problem and potential mitigating measures. The Farming & Wildlife Advisory Group SW has also been looking at reducing surface water flooding in the upper catchment through natural flood management techniques.
Ruishton /Crech St Michael and Thornfalcon Flood Signs Scheme	Erect five Variable Message Signs to warn drivers when the road to the Mill Lane Trading Estate is flooded. The road is in a flood zone and floods regularly. It is not obvious to vehicles how deep the flood water is.	New	Mar-20	Currently not funded - the proposal did not score well against the FAP criteria. Whilst signs would provide important information during times of flooding they do not reduce flood risk or increase resilience. Objective: • Warn people that the road is impassable due to flooding, before they get there. Outcomes: • Road users will be aware that the road is flooded and will take alternative routes. • Drivers will be less likely to try to drive through the floods and become stranded. Benefits: • Road users will be warned about the impassable road before they get there, so they can take alternative routes. • Fewer drivers will abandon cars in the flooded road.
Easthills Cemetery, Warminster Road, Frome	Groundwater flooding is currently causing parts of the Easthills Cemetery in Frome to be unusable. This scheme would put in place a series of French Drains traversing the site, to intercept ground water flow and discharge this to the existing ditch through the cemetery.	New	Mar-20	Currently not funded - the proposal did not score well against the FAP criteria. Objectives: • Reduce risk of flooding to graves. • Improve drainage of the land. • Enable full use and expansion of the cemetery. Benefits: • Improvements to water quality and land drainage. • Reduced risks to public health and the environment. • Reduced risk of flooding to graves to minimise flotation.