Somerset Rivers Authority Enhanced Programme 2021-22

What will Somerset Rivers Authority (SRA) do with its council tax and other local funding for 2021-22?

Where the SRA's local funding comes from

For 2021-22, Somerset Rivers Authority (SRA) will get £2,921,586 from Somerset council tax, and £20,000 contributed by the Axe Brue and Parrett Internal Drainage Boards (IDBs).

That means the SRA's total local funding for this year is £2,941,586.

A share of council tax is levied for the SRA by Somerset County Council and the four district councils: Mendip, Sedgemoor, Somerset West and Taunton, and South Somerset.

The SRA's council tax charge has not increased since 2016, when it was introduced.

What the SRA's local funding is spent on

Projects and activities

Just over 90.4% (that is, £2,659,586) of the SRA's local funding for 2021-22 will be spent on **21 different projects and activities** across Somerset. These are all listed and described down below. See <u>Contents – Quick Links</u>.

SRA activities stretch across the county from Dulverton in the west to Beckington in the east. Because different parts of the county have different needs, and it makes sense to approach different challenges from different angles, SRA activities lead to hundreds of improvements of different kinds.

Not all activities are expected to be completed within one year.

All works are part of what is called the SRA's Enhanced Programme. This gives Somerset extra flood protection and greater local resilience, in line with the objectives of <u>Somerset's 20 Year Flood Action</u> <u>Plan</u>, drawn up during the devastating floods of 2014.

Staff and running costs

Staff and other necessary costs account for just under 9.6% (that is, £282,000) of the SRA's local funding for 2021-22.

More precisely, 6.05% (£178,000) will be used for four

full-time staff and overheads and 1.02% (£30,000) for a part-time Technical Advisor on a fixed-term 12month contract

The remaining 2.51% (£74,000) is allocated to other costs such as professional support services (legal, financial, audit and governance), and an allowance for advice from Natural England on matters such as regulatory compliance.

Extra funding for SRA activities 2021-22

In 2021-22, the SRA's budget for its Enhanced Programme is being topped up with £780,414 redeployed from the SRA's contingency budget. This move particularly helps the major <u>River Sowy – King's</u> <u>Sedgemoor Drain (KSD) Enhancements Scheme</u> (<u>Phase One</u>), which is due to be delivered in the second half of 2021. For this scheme, the SRA will also use Growth Deal funding from the Heart of the South West Local Enterprise Partnership and some local funding reserved in previous years.

Lots more detailed information about all of the above subjects can be found in reports prepared for the <u>SRA</u> <u>Board meeting on Friday 5 March 2021</u>, when members approved the SRA's 2021-22 Enhanced Programme and budget.

Ongoing activities

Work on some activities for which funding was

allocated by the SRA in previous years will also be done in 2021-22. For example, on behalf of the SRA, in November 2018 the Parrett IDB signed a 5-year contract with water injection dredging specialists Van Oord, so maintenance dredging of the River Parrett is expected to happen during winter 2021-22.

Contents – Quick Links

Use the Quick Links below to find out more about individual projects and activities, and the Back toTop arrows to return to this main list of Contents.

<u>River Sowy-King's Sedgemoor Drain Enhancements</u> <u>Scheme (Phase 1)</u>

Bridgwater Tidal Barrier

Dulverton Weir and Leat Flood Alleviation Scheme (Phase 1)

Somerset Levels Strategic Mitigation

<u>Hills to Levels: Somerset Land Management and</u> <u>Natural Flood Management</u>

River Aller Upper Catchment Floodplain Restoration

Somerset Beaver Strategy

<u>Somerset Natural Flood Management Mapping and</u> <u>Targeting</u>

Natural Flood Management for Doniford Catchment Farms Somerset Trees for Water Action Fund

Burnham-on-Sea Water Management Investigation

Minehead 25-Year Action Plan

<u>River Sheppey Catchment Action Plans for Croscombe</u> and Shepton Mallet

Somerset Enhanced Maintenance: Gully Emptying

Somerset Enhanced Maintenance: Drain Jetting

Somerset Enhanced Maintenance: Silt-trap Emptying

<u>Somerset West and Taunton Enhanced Maintenance:</u> <u>Trash Screen Clearing</u>

<u>A358 Combe Florey Drainage Improvements</u>

Creech St Michael Culvert Upgrade

Beckington Drainage Improvements

Building Local Resilience across Somerset

River Sowy-King's Sedgemoor Drain Enhancements Scheme (Phase 1)

The first phase of a major project to increase the capacity of key parts of the Sowy and King's Sedgemoor Drain (KSD) through work in these rivers' channels and on their banks. Important side-stream structures will also be upgraded. This project will be delivered for Somerset Rivers Authority by the Environment Agency in the second half of 2021. On top of Growth Deal money from the Heart of the South West Local Enterprise Partnership and sums specially reserved in previous SRA annual budgets, some extra funding was allocated through the SRA's Enhanced Programme 2021-22 to help ensure the project's success.

Providing more capacity in the Sowy-KSD system, so that it can be used more effectively, is a key aim of Somerset's 20 Year Flood Action Plan, which is overseen by the SRA.

Sowy-KSD works have so far included:

- the creation of new river channels under the A372 at Beer Wall near Othery, along with tilting weirs;
- the installation of a new water level control gate near Chedzoy;
- de-silting bridges to increase channel capacity at Parchey and Dunball;
- removing obstructive masonry from under Dunball Old Bridge, which carries A38 traffic southbound, to help smooth the flow of water towards Dunball Sluice;
- nearly 100 water level control structure improvements on the Westmoor and Moorlinch Raised Water Level Areas and a big new culvert at Egypt's Clyse on Othery Rhyne.

All these works are part of an ongoing programme to reduce flood risks across 150 square miles, including moors upstream of Langport and moors west of the River Parrett. People, homes, farms, businesses, land and infrastructure will all benefit from a greater level of protection.

Bridgwater Tidal Barrier

Bridgwater Tidal Barrier is a major project led by the Environment Agency and Sedgemoor District Council. Designed to help protect more than 11,300 homes and 1,500 businesses, it has three main elements: a tidal barrier on the River Parrett at Chilton Trinity, 2.67 miles (4.3km) of new flood defence banks and 1.74 miles (2.8km) of raised banks downstream at Chilton Trinity, Combwich and Pawlett, and fish and eel passage improvements at 12 sites upstream of the barrier.

Most funding for this major project will come from central government major project funding. However, some local match funding is also required to secure the national funding. The Environment Agency – working together with Sedgemoor District Council – therefore sought a contribution from Somerset Rivers Authority in recognition of the important role the Barrier will fulfil in protecting Somerset residents, homes and businesses.

Dulverton Weir and Leat Flood Alleviation Scheme

(Phase 1)

A study to establish how flood risks in Dulverton could be reduced by restoring the town's medieval weir and the Leat that loops off it. Dulverton has a long history of flooding. Over the last five years, Dulverton Flood Action Group has been called out 12 times to set up flood defences.

The weir across the River Barle is 150 metres wide. It diverts water from the river into a complex Leat system created in the past to provide power for various mills, which are nowadays mostly homes. Leat water flows alongside and under properties in Dulverton, then re-joins the Barle on the other side of town.

Both the weir and the Leat are eroded and damaged. The first phase of work to be funded by Somerset Rivers Authority will include:

- flood alleviation modelling
- carrying out ecological surveys
- finalising designs for repairs and improvements
- getting any necessary approvals
- putting the second phase of work out to tender, and agreeing costs
- seeking funding for the second phase

This work will be delivered for the SRA by Somerset West and Taunton Council, which owns the weir and Leat. If all goes well, a second phase of extensive repairs and improvements will follow, with more funding from the SRA and possibly other bodies. Dulverton Leat Trust has then agreed in principle to lease the restored weir and Leat from the council, and to accept responsibility for all future maintenance and costs.

▲ Back to Top
 ▲

Somerset Levels Strategic Mitigation

A Strategic Approach to Mitigation project is being led for the SRA by Natural England. Its three main aims are to reduce costs and risks, to enable flood risk management schemes in the county to go ahead, and to secure a wide range of environmental benefits. Specifically on the Somerset Levels, and in relation to major projects such as dredging and ongoing River Sowy-King's Sedgemoor Drain enhancements, Natural England has identified a series of actions that need to be implemented.

SRA funding has therefore been given for:

- the development of a protocol for monitoring the condition of the Somerset wetlands
- the development of a methodology for mapping wider wetland areas of critical importance to winter waterfowl
- initiating the updating of Water Level
 Management Plans and establishing operational protocols including a set of Environmental
 Trigger points across Somerset
- 4. developing alternative solutions to the current suite of Raised Water Level Areas

▲ Back to Top
 ▲

Hills to Levels: Somerset Land Management and Natural Flood Management

Somerset Rivers Authority continues to fund the biggest range of natural flood management (NFM) activities in the UK, as part of Hills to Levels. Plans for 2021-22 include more schemes in the Mendip District Council area, following on from earlier SRAfunded sub-catchment analyses across Mendip.

There are seven main elements, all to be delivered for the SRA by the Farming and Wildlife Advisory Group SouthWest (FWAG SW), except for the NFM schemes in Mendip (see below) for which Mendip District Council will take responsibility, while working in partnership with FWAG SW.

1 NFM schemes countywide: Design and implementation of 20 small-scale natural flood management schemes to hold back water in upper catchments and reduce peak flows.

2 NFM schemes in Mendip: Four nature-based schemes in sub-catchments with flooding problems analysed for the SRA in two earlier Mendip-wide investigations. These projects will deliver a range of NFM measures including (where appropriate) 'Stage Zero' techniques of river restoration. In parts of subcatchments that are more built-up, schemes may make some use of Sustainable Drainage Systems (SuDS) techniques. Some existing flood alleviation features may be replaced, repaired or restored (for example, ponds).

3 Match funding: Match funding for five NFM projects to hold back water and reduce peak flows, namely:

- the Environment Agency's Hills to Levels Multi-Benefits project in the sub-catchments of the Upper Washford, Merriott Stream, North Petherton Stream, Back Stream and Halse Water
- the Environment Agency's Water Environment Grant (WEG) Merriott Stream de-culverting initiative
- Natural England's WEG West Sedgemoor Catchment initiative
- the Somerset Frome Water Environment Improvement Fund
- a major scheme in the Wallbridge area of Frome, involving Section 106 money from developers

4 Highways referrals: Funding for responding to 40 referrals of cases where better land management could help to fix problems such as roads flooding because of run-off from fields. In such cases it makes sense to address causes as well as symptoms. Extra SRA funding enables this to happen with partners working together to tackle issues beyond their usual limited remits.

5 Soil husbandry: Funding for increased uptake of better soil management techniques and cropping changes to improve the infiltration of water and

reduce run-off on 35 farms. Including 10 split field trials, 15 soil husbandry reports and five workshops.

6 Online NFM auction: An online auction countywide, excepting only land in lower-lying Internal Drainage Board areas, as the main purpose of natural flood management (NFM) activities in Somerset is to slow the flow of water down through higher parts of river catchments. Farmers will be able select for themselves different NFM activities, pick out parts of their land where they believe those activities will produce the best flood prevention results for themselves and for local communities and then bid for funding for those activities. Previous auctions have led to hundreds of successful bids for various extensive improvements.

7 Modelling and monitoring: Modelling and/or monitoring at sub-catchment scale to demonstrate the effectiveness of natural flood management measures that have already been installed.

▲ Back to Top ▲

River Aller Upper Catchment Floodplain Restoration

The National Trust's Riverlands project in Porlock Vale is developing innovative approaches to working with natural processes. At Tivington Farm in the upper catchment of the River Aller it is proposed to restore and re-naturalise 125 hectares.

Re-connecting ditches and headwater tributaries to

their floodplain will slow the flow of water. This will help to reduce flood risks for nearly 100 properties downstream in places including Allerford and Bossington. It will help to reduce regular flooding of the A39 between Porlock and Minehead, and to protect several B roads and smaller lanes. It will also substantially benefit wildlife and the local landscape and environment.

This project is part-funded by the EU's Interreg2Seas programme and by the Environment Agency. Matchfunding has been given by the SRA for works including modelling and design.

▲ Back to Top ▲

Somerset Beaver Strategy

Beavers are being re-introduced across the UK because their activities can bring many benefits. These include reduced flood risks, better water quality, and habitat and biodiversity improvements. Beavers are popular with the public, one poll finding 76% in favour of the creatures being re-introduced. However, in some places and situations, beavers can damage property and infrastructure, and have undesirable consequences for farming and other land and river uses.

A few beavers are already living inside enclosures in the catchments of the Somerset Frome and the River Aller. Recognising that further initiatives are inevitable, the SRA is jointly funding the development of a Somerset Beaver Strategy beaver strategy with South West Wildlife Trusts, so that lessons can be learned from elsewhere in the region, particularly as regards fishing interests.

The SRA's aim is that people on all sides of the debate about beavers should be well-informed, so that evidence-based and science-led decisions can be taken about possible courses of action, and suitable planning and management agreed.

This proposal involves the Farming & Wildlife Advisory Group SouthWest, Somerset Wildlife Trust, the National Trust, the Beaver Trust, and Exeter University. These partners will liaise with bodies including the Environment Agency, Natural England, Somerset Drainage Boards Consortium, the National Farmers Union, the Country Land & Business Association, fisheries organisations and angling clubs, and local flood groups.

↑ Back to Top

Somerset Natural Flood Management Mapping and Targeting

There is a growing interest in – and demand for – natural flood management (NFM) measures across Somerset. This proposal is designed to review what has been achieved by the SRA and others over the last six years, to strengthen coordination between different organisations and individuals, and to better target future activities in key areas. The Farming & Wildlife Advisory Group SouthWest (FWAG SW) has been given SRA funding to enable work with Westcountry Rivers Trust on:

- Mapping ALL existing Somerset Natural Flood Management (NFM) schemes by type of intervention.
- Producing NFM targeting maps to identify sites and sub-catchments offering the greatest potential for NFM and future flood-friendly Land Management delivery (based on slopes, types of soil and catchment, hydrology, etc).
- 3. Zoning the most suitable and effective NFM measures in different areas.
- Ground-truthing potential larger sites to determine the feasibility of NFM, checking infield and making initial contact with landowners.

Natural Flood Management for Doniford Catchment Farms

A bid from the Wildfowl & Wetlands Trust (WWT) and the Farming & Wildlife Advisory Group SouthWest (FWAG SW) to enhance a Green Recovery Challenge Fund (GRCF) project in West Somerset. The GRCF is funded by Defra and administered by the National Lottery Heritage Fund. The GRCF West Somerset project will help communities in Bicknoller, Elworthy, Sampford Brett and Stogumber to create parish-level Natural Flood Management (NFM) opportunity maps, establish parish NFM action groups and deliver NFM measures.

Extra SRA funding has been given to FWAG SW and the WWT to enable complementary work with farmers and landowners, chiefly developing whole farm NFM plans and delivering a series of NFM measures. The main local aim is to help tackle the long history of flooding problems suffered by Doniford catchment communities. Partners' wider ambition is to create a parish-based model for action that could be reproduced across Somerset.

Somerset Trees for Water Action Fund

The SRA first funded Trees for Water in the Enhanced Programme for 2020-21. It is a tree and hedge planting action fund designed to help local communities reduce flood risks resulting from surface water run-off issues. The project is run by Reimagining the Levels in collaboration with the Farming & Wildlife Advisory Group SouthWest (FWAG SW). Despite the challenges of the coronavirus pandemic, the project has had a successful year with many useful sites being volunteered.

Further SRA funding has been awarded to enable the project to continue. In 2020-21 Trees for Water targeted Mendip and South Somerset district council areas. It is now proposed in 2021-22 to include Somerset West and Taunton, and Sedgemoor.

Trees for Water is particularly designed to suit strategically important sites not large enough for Countryside Stewardship grants and not special enough in conservation terms to concern Natural England. This Action Fund is meant to be flexible, bespoke and un-bureaucratic.

Burnham-on-Sea Water Management Investigation

An investigation into flooding problems in a popular part of Burnham-on-Sea. This study will focus on the large area that feeds into the lakes at Apex Leisure & Wildlife Park and Haven Holiday Park, and include a survey of the lakes themselves.

The aim is to identify improvements that will provide better protection against flooding and more effective long-term management of local drainage systems. Around 100 properties in the Maple Drive area of Burnham could particularly benefit.

This project is being led for Somerset Rivers Authority by Sedgemoor District Council.

▲ Back to Top ▲

Minehead 25-Year Action Plan

Many properties and businesses in Minehead are at

risk of flooding, and there is increasing concern locally about proposed developments soon putting extra pressure on drainage systems already struggling to cope. Climate change also makes flooding more likely.

Somerset County Council therefore asked the SRA to part-fund the urgent development of a 25-year action plan for tackling flood risks from all sources in and around Minehead. The county council and Wessex Water say they will put £60,000 towards this work. Other partners involved would include the Environment Agency, Somerset Drainage Boards Consortium (which covers part of Minehead), Somerset West and Taunton Council and the Farming & Wildlife Advisory Group SouthWest. This kind of collaboration is in line with the SRA's remit of encouraging extra partnership working.

Action plan efforts would include gathering data and evidence, constructing an integrated catchment model for Minehead, and developing a costed programme of priority projects.

▲ Back to Top ▲

River Sheppey Catchment Action Plans for Croscombe and Shepton Mallet

The sub-catchments of Croscombe and Shepton Mallet are historically prone to flooding. The most recent event occurred in October 2020 when 19 properties flooded internally and many roads including the A371 were submerged and made impassable. Numerous different factors interact in these sub-catchments in ways that are not fully understood. Part of the problem is a complex network of culverts – especially beneath listed buildings – which is difficult to access, monitor and maintain.

To better grasp the issues involved and find solutions, an integrated study of the whole River Sheppey catchment is required. The SRA was therefore asked by Mendip District Council to fund a major detailed investigation, in line with its remit of enabling extra partnership working. Mendip will work with organisations such as the Environment Agency, Somerset County Council, Wessex Water, the Farming & Wildlife Advisory Group SouthWest, Shepton Mallet Town Council, Croscombe Parish Council Flood Committee and the Darshill and Bowlish Conservation Society.

The study will include reviews of all existing information about local flooding problems, new CCTV and walkover surveys, new flow route and capacity assessments and catchment modelling. Costed action plans combining a wide range of measures will then provide the basis for detailed funding bids and effective improvements

▲ Back to Top ▲

Four programmes of Enhanced Maintenance

Four programmes of enhanced maintenance are being planned by Somerset County Council's Highways Department. The aim is to help keep roads open in places highly susceptible to flooding, make them safer, preserve access for communities, and safeguard properties from flooding, all in line with the objectives of Somerset's 20 Year Flood Action Plan. These works benefit residents, businesses and visitors. Where possible, they are dovetailed with the Hills to Levels system of highway referrals to reduce run-off from land onto roads.

Somerset Enhanced Maintenance: Gully Emptying

Gullies in places most at risk of flooding across Somerset are cleansed once a year by Somerset County Council. Extra SRA funding means that around 20,000 gullies can be emptied twice a year.

Somerset Enhanced Maintenance: Drain Jetting

Extra SRA-funded drain jetting targets places across Somerset at high risk of flooding. Drains are usually only jetted by Somerset County Council on a reactive basis: that is, once they have become blocked. Proactive jetting is designed to stop drains from getting blocked in the first place, by removing silt and debris.

▲ Back to Top
 ▲

Somerset Enhanced Maintenance: Silt-trap Emptying

Silt-traps are designed to reduce flood risks by collecting silt washed out from land near roads, so highway drainage systems are not jammed with sludge. Somerset has 79 silt-traps at places known to be susceptible to flooding. Extra SRA funding enables Somerset County Council's Highways Department to carry out a programme of pro-active cleansing, so that traps themselves do not get blocked up, but work as they should.

↑ Back to Top

Somerset West and Taunton Enhanced Maintenance: Trash Screen Clearing

Extra SRA-funded trash screen clearing targets just under 40 places. Trash screens are usually only cleared by Somerset County Council on a reactive basis: that is, once they have become blocked and already caused people problems. Pro-active clearing is designed to stop screens from getting clogged up in the first place.

A358 Combe Florey Drainage Improvements

Part of the A358 near Combe Florey is flooding more often across both lanes because of run-off from adjacent agricultural land. Large quantities of fine soil are spreading on to the road and blocking drains, which cannot cope with the volumes coming down.

The A358 is one of only two main routes into – and out of – West Somerset. It is also a county freight route. Repeated flooding inconveniences and potentially endangers road users.

SRA-funded efforts are being made to encourage better land management practices by local landowners, to reduce run-off from nearby fields. Options for natural flood management (NFM) interventions are also being investigated. However, while NFM measures may help, it is not believed they will entirely fix problems.

Somerset County Council's Highways Department is therefore proposing to install a new filter drain system, to make structural repairs where need be, and to re-profile sections of the carriageway so that better use can be made of existing assets. Roadside ditches and grips would also be cleared or re-constructed to enable surface water to discharge more effectively from the highway.

▲ Back to Top ▲

Creech St Michael Culvert Upgrade

Surface water flooding is a long-standing problem for the residents of Charlton Road in Creech St Michael near Taunton. Somerset County Council's Highways Department will use SRA funding to help around 30 local properties by installing a new culvert. The existing system cannot cope with the volume of water that flows down a ditch and has to make two 90degree turns.

▲ Back to Top ▲

Beckington Drainage Improvements

A two-phase project following on from a major SRAfunded investigation into almost every aspect of flooding and foul sewer problems in Beckington. The aim is to reduce the risks of future widespread flooding in the village, particularly along Goose Street, Warminster Road, Frome Road and Church Hill. In recent years surface water flooding has occurred in these areas in January and November 2011, in May, October, and December 2012, and in December 2013.

This project is being led for the SRA by Mendip District Council. Phase 1 will focus on detailed designs for high priority improvements to Beckington's existing drainage system, including culvert repairs and new manholes to allow for more inspections and better long-term maintenance.

Phase 2 will focus on delivery. As well as drainage system repairs and improvements, some upstream

natural flood management measures will seek to reduce the amounts of sediment and debris getting into culverts and impeding their usefulness. Wessex Water will reduce the number of foul sewer misconnections: this work is being funded by Wessex Water. Once new manholes are in place, previously inaccessible parts of the drainage system may be CCTV-surveyed. This may lead to further works, depending upon what is found.

An intensive educational campaign about riparian responsibilities will be mounted. Its aim will be to make residents aware of what they must do in future to look after their parts of Beckington's improved drainage system. Wessex Water also wants people to stop clogging up pipes and sewers with fat, wet wipes and other unsuitable materials.

♠ Back to Top

Building Local Resilience across Somerset

Alongside practical moves to help Somerset get better prepared for flooding, Somerset Rivers Authority will encourage greater understanding of flood risks, the implications of climate change, and the responsibilities of property owners and land managers.

Key elements to be funded by the SRA in 2021-22 include:

• funding for the continued employment until

March 2023 of the SRA's Community Engagement Officer and Community Engagement Support Officer

- community film project about flooding in Somerset developed in partnership with Somerset
 Film, using archive film of historic flooding
- fund for resources that will help the Community Engagement team to deliver projects
- focus on boosting the resilience of small businesses
- engagement with schools in areas at risk of flooding (coronavirus restrictions permitting)
- developing links between existing flood groups, and encouraging new groups
- helping Climatewise (an international insurance industry initiative based at Cambridge University) to study the economic impacts of climate change and flooding in Somerset through the lens of insurability

The Community Engagement team will continue to lead existing SRA projects such as trialling very localised flood gauges in West Somerset, and continue to work in partnership on big projects led by others such as Adapting the Levels. Where SRA partners need help with local communities on SRA-funded projects, the team will help in various ways to achieve success.