

At a glance

KEY POINTS FROM 2018-19

£3.81m EXTRA

spent in Somerset on flood risk reduction and greater resilience



of places benefit across Somerset

BIGGEST EVER

use of water injection dredging techniques to maintain the River Parrett



AWARD WINNING

Hills to Levels wins UK River Prize for natural flood management



Unique and massive review published of Somerset SuDS (Sustainable Drainage Systems)



Private Members' Bill to establish SRA as separate legal body passes Third Reading in House of Commons and begins progress through House of Lords

around 1**5,207**

highways structures given extra cleaning to stop roads flooding



Major projects backed by SRA include further River Parrett dredging, River Sowy-King's Sedgemoor Drain enhancements, Bridgwater Tidal Barrier, Taunton improvements



25th October: First Somerset Resilience Day

About Somerset Rivers Authority

DURING the devastating floods of 2013-14, Somerset decided to try a new, local approach to tackling flooding. Various partners drew up a 20 Year Flood Action Plan. Somerset Rivers Authority was launched in January 2015 to oversee that Plan and do the extra work that long experience has shown Somerset needs.

There is no single answer to Somerset's many flooding problems, and different parts of the county have different needs. That is why the SRA was set up as a partnership. Different organisations are limited in what they can do individually, but as SRA partners they can get more done by acting collectively. They can take local, grassroots views about what is important for people in Somerset.

SOMERSET RIVERS AUTHORITY BOARD was made up of the following* during 2018-19:

















DEANE BOROUGH

South Somerset District Council

each represented

by **one member**



Axe-Brue Internal Drainage Board and Parrett IDB each represented by two members

Board's main functions: set strategy and priorities, approve budgets and programmes of work, ensure progress and encourage partnership working, be publicly accountable.

SRA JOINT SCRUTINY PANEL

Panel's main function: scrutiny. Each council has two representatives, the IDBs one each.

The SRA Board meets quarterly, Scrutiny Panel every six months. Members of the public and press are welcome to attend.

SRA Workstreams and Funding

Workstreams

Through local taxation, the SRA funds a unique depth and breadth of actions. These are grouped into five workstreams, that reflect the local priorities of Somerset's 20 Year Flood Action Plan, and the need to attack problems from different angles. The five workstreams featured in the following pages of this summary Annual Report are **Dredging & River Management (W1)**, **Land Management (W2)**, **Urban Water Management (W3)**, **Resilient Infrastructure (W4)** and **Building Community Resilience (W5)**.

Funding from local partners

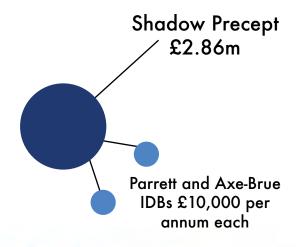
In December 2015, the Government gave Somerset County Council and Somerset's district councils power to raise money for the work of the SRA. Every year – as things stand - councils can choose to raise what is called a 'shadow precept' of up to 1.25% of council tax. In 2018-19, the total raised through council tax was £2.86million. The level of the charge has been frozen since its inception, although every year it does increases by a small amount, because the number of people who live in Somerset and pay council tax keeps going up. The Parrett and Axe-Brue Internal Drainage Boards also choose to contribute £10,000 a year each.

Funding from Heart of the South West Local Enterprise Partnership (HotSWLEP)

The SRA gets no central government funding from year to year. However, in 2014 Government funding of £13.049m was awarded through the HotSWLEP Growth Deal Fund for the carrying out of Somerset's Flood Action Plan (FAP) – with £3.55m for flooding alleviation works in 2015-16, and £9.5m for future years. As the body that oversees the FAP, the SRA plans to spend its Growth Deal funding by 2021 on several major projects.

Legislation

The Government has pledged several times to put the SRA on a secure long-term footing, and give it the power to raise its own share of council tax. With Government support, Somerton and Frome MP David Warburton took up a Rivers Authorities and Land Drainage Bill drafted by Defra as a Private Members' Bill. He introduced this Bill to Parliament on 5 March 2018, then a burst of activity in February and March 2019 saw it pass through the House of Commons with cross-party support. It went up to the House of Lords and had its 2nd Reading on 16 May 2019.









Transcripts of all debates can be read on Hansard: https://services.parliament.uk/Bills/2017-19/ riversauthoritiesandlanddrainage.html Following a critical report by the Lords' Delegated Powers and Regulatory Reform Committee, whose arguments were backed by the Lords' Constitution Committee, the Bill was withdrawn by Mr Warburton in July 2019. New ways forward are now being discussed.



DREDGING & RIVER MANAGEMENT

2018-19 SUMMARY: Somerset Rivers Authority spends more on dredging and river management than it does on any other workstream. Water injection dredging (WID) and silt monitoring on the River Parrett are outstanding examples of innovation in this workstream. 37,500m³ of silt was removed in just a few days, downstream of Burrowbridge. Extra maintenance, repairs, improvements and investigations have figured strongly across the county. Schemes are designed and delivered for the SRA by a range of partners and contractors.

BRIDGWATER TIDAL BARRIER

DUNSTER FLOOD RELIEF CHANNEL

TAUNTONIMPROVEMENTS

KING'S SEDGEMOOR DRAIN DE-SILTING AT PARCHEY AND DUNBALL

CHADMEAD & MOORLAND INVESTIGATIONS

RIVER PARRETT WATER INJECTION DREDGE

RIVER BRUE CATCHMENT NORTH DRAIN PUMPING STATION

FROME
RIVER BANK REPAIRS

ALLER MOOR MAINTENANCE

WESTONZOYLAND
DESIGNS FOR IMPROVEMENTS

WEST SEDGEMOOR
MAINTENANCE & IMPROVEMENTS









River Sowy-King's Sedgemoor Drain Enhancements

Dredging of two sites along King's Sedgemoor Drain, back to their capacity 50 years ago.



West Sedgemoor / Aller Moor 18.5 miles of extra maintenance of Internal Drainage Board 'viewed rhynes' (drainage ditches) to carry water away more effectively.



North Drain Pumping Station Replaced 50-year-old leaking concrete roof with lightweight new roof, along with other



Frome
Repair of the river banks in Frome town centre, reducing flood risks to about 300 properties.



DunsterRepairs to the River Avill Flood Relief Channel and erosion protection at Gallox Bridge.



Moorland

'Lost watercourses' investigation highlights
overgrown and blocked ditches.

Bridgwater development of

SRA funding supports development of Bridgwater Tidal Barrier, which will protect nearly 13,000 properties.



LAND MANAGEMENT INCLUDING NATURAL FLOOD MANAGEMENT (NFM)

2018-19 SUMMARY: 39 grants awarded to farmers and landowners for NFM schemes to slow of the flow of water, including 15 given as Triple C match-funding, 23 highways investigations ('referrals'), 17 soil advisory visits, the UK's first online auctions for NFM works and 14 activities; Hills to Levels won the UK River Prize.



KEY:



CAPITAL GRANT SCHEMES



TRIPLE C MATCH-FUNDED SCHEMES



HIGHWAYS REFERRALS

Somerset Rivers Authority funds the biggest range of natural flood management activities in the UK as part of its Land Management workstream. This award-winning workstream is admired nationally for its innovation, strong partnership working and increasing sophistication. It is led for the SRA by the Farming & Wildlife Advisory Group SW (FWAG SW). Activities generally go under the popular local branding of Hills to Levels. This makes it easier for partners to get involved and to contribute match-funding so that more can be achieved. It also helps that as Somerset has some famous hills and valleys and floodplains, the idea of trying to slow the flow of water from Hills to Levels can be simply understood.

There are three main strands to this SRA workstream. They are:

- 1. Capital grants offered to farmers and landowners for Natural Flood Management projects that slow the flow of water and reduce flooding risks across the county.
- 2. 'Highways referrals' that is, looking for answers to highway flooding problems in better management of land nearby.
- 3. Soil husbandry to reduce surface run-off.

The EU's Interreg 2 Seas part-funds Hills to Levels through the Triple C initiative. The three Cs stand for: Climate resilient; Community-based; Catchment planning and management.



UK River Prize

Hills to Levels won the UK River Prize 2018 for catchment improvements. The SRA is a major Hills to Levels funder.



Highways Referrals

The SRA funded 23 investigations into how land management changes could reduce road flooding, with solutions such as this hedge at Barrington.



Leaky Woody Dams >

Eight of these dams have been created near Lufton College near Yeovil, along with major pond improvement works at Manor Farm, Lufton.



Pond De-silting >

Around 4,950m² of a large pond upstream of Bishop's Lydeard de-silted to allow storage of an extra 3700m³ of water at Cothelstone.



Online Auctions

The UK's first online auctions for NFM works gave farmers a choice of measures to bid for, including planting winter crops to stop soil being washed off fields, planting hedges to slow the flow of water and aerating soil to increase the amount of rain that can be absorbed.



Soil Visits

The SRA's aims are improved soil and hence reduced run-off, as here at Nunney near Frome.

< Wood Hingeing

A new technique of hingeing living trees into a watercourse is being trialled at Folly Farmyard in Dommett, Buckland St Mary.



< Brash Woody Dams

Aisholt Common on the Quantocks, matchfunding Triple C. The three Cs stand for Climate resilient, Community-based, and Catchment planning and management.



2018-19 SUMMARY of Workstream 3: A unique 747-page review of Somerset's Sustainable Drainage Systems (SuDS) has been published, and a contract let for the production of Somerset-specific guidance for property developers to help them create high quality SuDS at new sites across the county. A SuDS inspections service has been funded; responsibility for rain garden facilities in Taunton handed over; progress made on plans for a storage pond in Yeovil; and a second phase of works completed at Wirral Park balance pond and pumping station in Glastonbury.



SuDS Review

In 2018-19, this workstream's outstanding achievement was the publication of this massive review of sustainable drainage schemes across Somerset. 20 major new development sites were assessed to ascertain whether they were adequately designed, constructed as designed, had any deficiencies, and were being adequately maintained. The SRA and its partners want to encourage more high-quality design and better place-making. Generally, in terms of being able to cope with basic flows of water, and allowing for climate change, over three-quarters of the sites surveyed were satisfactory or better, but 6% were rated poor or very poor.





Rain Gardens and Sponge 2020

Responsibility for maintenance of new rain garden facilities at Middleway and Kilkenny Court, Taunton, formally handed over to Taunton Deane Borough Council (as was; now Somerset West and Taunton Council). Somerset County Council worked with Westcountry Rivers Trust on the planters, as part of the EU-backed Somerset Sponge 2020 project. The aim of Sponge 2020 is to encourage 'innovative participatory adaptation solutions to reduce the risks of and damage from urban flooding... at considerably lower costs'. The SRA has been part-funding the development of Somerset County Council's Sponge 2020 plans for car park retrofits in Taunton.



European Regional Development Fund

RESILIENT INFRASTRUCTURE

2018-19 SUMMARY of Workstream 4: Somerset Rivers Authority carried out an extensive programme of extra maintenance works to reduce flood risks to roads and nearby properties, including gully-emptying, drain jetting, edge of road clearing, de-silting of structures and culvert improvements. Drainage works have been carried out near **Chelston** and **Stoke sub Hamdon**; schemes designed for **Monksilver**, and **Stogursey** and **Shurton**; studies advanced at **Beckington** and **Bradford on Tone**.

Although its name emphasises rivers, Somerset Rivers Authority deals with highways as well as waterways. This is because the SRA oversees Somerset's 20 Year Flood Action Plan, which was drawn up during the floods of 2013-14. Those floods closed 81 roads, often for long periods. Countless people suffered difficulties. Businesses lost time and money: 86% of Somerset businesses were badly hit – the estimated cost to the local economy was up to £15 million.

So two of the Flood Action Plan's six main objectives relate directly to making Somerset's infrastructure more resilient: they are to 'Maintain access for communities and business' and to 'Ensure strategic road and rail connectivity, both within Somerset and through the county to the South West peninsula'.



7 structures de-silted

Case study: Blake Bridge, Bridgwater.
The main aims were to increase the River
Parrett's ability to flow under the bridge,
and to safeguard the bridge itself, as serious
pressures were being exerted on its arches
by very large build-ups of thick, heavy silt.
Methods used included high-pressure jetting
of silt on the banks and some water injection
dredging from a vessel on the river. This
job was delivered for the SRA by Somerset
County Council's Highways Department
using contractors Crestmoor Construction
and several sub-contractors.





Action to reduce road flooding, making people's lives easier and safer







Carried out for Somerset Rivers Authority for Somerset County Council's Highways Department.







Culvert inspections and remedial works in Internal Drainage Board areas: An ongoing programme of de-silting, vegetation clearance, high-pressure water jetting and structural repairs. The main aims are to improve the conveyance of water and to help prevent disruption to residents and road users.







Case study: One high-priority site was at Nythe, where a culvert was in a very bad state, with short sections of pipe disconnected and wonky. This increased the danger of water backing up and flooding the road. Also, a hole had appeared in the edge of the road and the ground was collapsing. This dangerously crumbling culvert was repaired at the end of March 2019, so that water could drain through under Nythe Road and traffic could keep flowing north of Langport between High Ham and Pedwell. Somerset Drainage Boards Consortium delivered the scheme for the SRA, using local contractors Bernard Perry. The job was completed ahead of schedule.

BUILDING LOCAL RESILIENCE

2018-19 SUMMARY: The SRA part-funded Somerset's first Resilience Day, an affordable flood insurance survey on the Somerset Levels & Moors and a pilot household resilience survey in **Misterton** near Crewkerne. It helped to set up the **West Moor** Futures Group and began work on **Wet Moor**, **Tealham** and **Tadham Moor**, gave communities in **Curry Mallet**, **High Ham**, **Hatch Beauchamp**, **Milverton** and **Sampford Brett** grants for equipment and backed Somerset's new Co-Adapt project designed to tackle the water-related effects of climate change (flooding and drought).

One of the six main objectives of Somerset's 20 Year Flood Action Plan is to "Increase resilience to flooding for families, agriculture, business, communities and wildlife". Hence this workstream. It aims to make people better informed and equipped, so they can better protect themselves against flooding and recover more quickly afterwards. It also aims to encourage discussions about flooding and water management issues across Somerset, especially adaptation and sustainability.





CASE STUDY: For the first **Somerset Resilience Day** in October, more than 80 volunteers, wardens, councillors and community leaders travelled to North Petherton for talks, workshops and displays. Subjects included riparian responsibilities (what people who own watercourses are supposed to do) and the art of setting up a flood group – and keeping it going. A key feature was giving people chance to learn from each other's experiences.

CASE STUDY: In November, villagers in **Misterton** took part in a **household resilience survey**. This was organised and funded by the SRA in partnership with Somerset Prepared, Misterton's lively parish resilience team, and a willing bunch of local Rotary volunteers. After a four-page leaflet went to all households in the village in early November, Rotary members called at every property to offer further advice and gather information. Following on from this pilot project, other communities across Somerset are to be visited.

LOOKING INTO THE FUTURE

Somerset Rivers Authority has been encouraging local people and organisations to co-operate and adapt to the water-related effects of climate change – flooding and drought. The Somerset Levels, particularly, are at the forefront of concerns about the effects of climate change and sea level rises. Several partners in the SRA – Somerset County Council, Mendip District Council, Sedgemoor District Council, South Somerset District Council, and the new Somerset West and Taunton Council – have all declared climate emergencies and pledged to take action. Members of the SRA Joint Scrutiny Panel, largely drawn from local councils, have raised climate change issues and the subject has regularly featured in debates in Parliament about the Rivers Authorities and Land Drainage Bill. The Environment Agency's new Draft National Flood and Coastal Risk Management Strategy also stresses that "climate change is the biggest challenge we face. It poses the greatest threat to our economy, environment, health, and way of life. The increased risk of flooding and coastal change that it brings is significant."

Notable SRA moves in 2018-19 have included funding for a new project called Co-Adapt and support for a new Environmental Land Management scheme on the Somerset Levels.

Co-Adapt: The aim of Co-Adapt is to get local people and organisations co-operating and adapting to the water-related effects of climate change. Work began early in 2019. The SRA's main interest is in flood protection and alleviation, but Co-Adapt will also help to encourage greater resilience to drought on nearly 10 square miles of the Somerset Levels. Recent Environment Agency predictions suggest that England could run short of water within 25 years. One of the aims of the Environment Agency's new draft national Flood and Coastal Risk Management Strategy is to "help communities better understand their risk and give them more control about how to adapt and respond".

Environmental Land Management: In June 2018 the SRA Board agreed to be part of developing a new Environmental Land Management scheme in the Somerset Levels. The Board also agreed to be involved in trialling how payments for land management on the Levels could be combined with flood risk management, agricultural production and the delivery of improvements for nature.

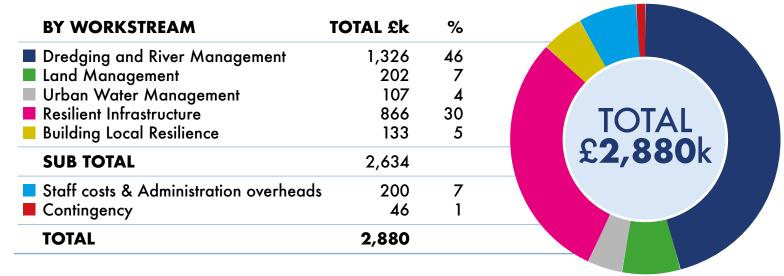
The SRA Board agreed it made sense for the Somerset Levels to seek to become a pilot area, so it could try to shape its own distinctive future, in much the same way as Somerset Rivers Authority has allowed the whole of Somerset to create its own unique and local ways of tackling flooding.



Financial Summary

2018-19 LOCAL PARTNER FUNDING

The SRA currently receives annual funding raised by Somerset's local authorities through a shadow precept* and the Parrett Internal and Axe-Brue Drainage Boards. We call these funds Local Partner Funds. In 2018-19 the SRA received funds totalling £2.88m. The SRA launched its fourth year with allocating 92% of this funding to a further 22 schemes continuing its Enhanced Programme of Works that delivers the 20 Year Flood Action Plan. The remaining 8% went towards staffing and administration and to boost a small contingency budget. The 20 Year Flood Action Plan is separated into five workstreams and the table below shows a summary of how the 2018-19 Local Partner Funds were allocated:



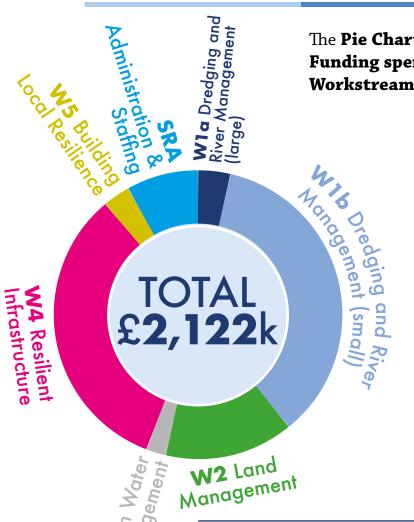
FINANCIAL STATEMENT

The SRA has funded over 130 schemes, actions and initiatives having raised over £11.5m since its inception in January 2015. A large proportion of these schemes can be delivered within the same financial year however some schemes and initiatives, whether they be small, large or complex by design require more long-term planning and take longer to complete.

LOCAL PARTNER FUNDING 2018-19 FINANCIAL SUMMARY	LOCAL PARTNER FUNDS CARRIED FORWARD FROM PREVIOUS YEARS £k	_	FORECAST SPEND IN 2019-20 ONWARDS £k
Enhanced Programme of Works allocation	n 5,865	1,951	3,914
Contingency	220	0	220
Staffing & Administration overheads	203	1 <i>7</i> 1	32
TOTAL	6,288	2,122	4,166

^{*}A 1.25% 'alternative notional amount' (ANA) added to individual council tax bills; permission to raise this ANA is given by central government and can be used only to fund the Somerset Rivers Authority.

Financial Summary



The Pie Chart to the left shows SRA Local Partner Funding spend during 18-19 financial year by Workstream (£k).

The SRA does not commission works directly, instead SRA partners deliver works on behalf of the SRA. Once works are complete, funds are claimed back from the SRA. Funds claimed back equate to the actual spend by the SRA. During 2018-19 the SRA processed delivery partner claims for Local Partner Funds totalling £2,122k:

92% (£1,952k) delivering the Enhanced Programme of works



8% (£170k) relates to staff costs and administration overheads

HotSWLEP Somerset Flooding

Following the 2012 and 2013-14 floods, the Heart of the South West Local Enterprise Partnership (HotSWLEP) awarded £13.049m of Growth Deal funding up to March 2021 to enable key capital schemes delivered. The table below provides the current balance of Growth Deal funding including what was spent during 2018-19.

Taunton Strategic Flood Alleviation Improvements Scheme (contribution) TOTAL	65 13,049	65 6,479	0 1,688	4,882
Land Management Capital Grants	550	459	82	9
Bridgwater Tidal Barrier (contribution)	2,000	<i>75</i> 1	1,249	0
River Sowy/KSD Enhancement Scheme	e 7,996	4,346	192	3,458
Pioneer Dredging River Parrett	2,438	858	165	1,415
HotSWLEP FUNDING 2018-19 SUMMARY	FUNDING ALLOCATION £k	SPENT TO 31 MARCH 2019 £k	SPENT DURING 2018-19 £k	FUNDING BALANCE £k

