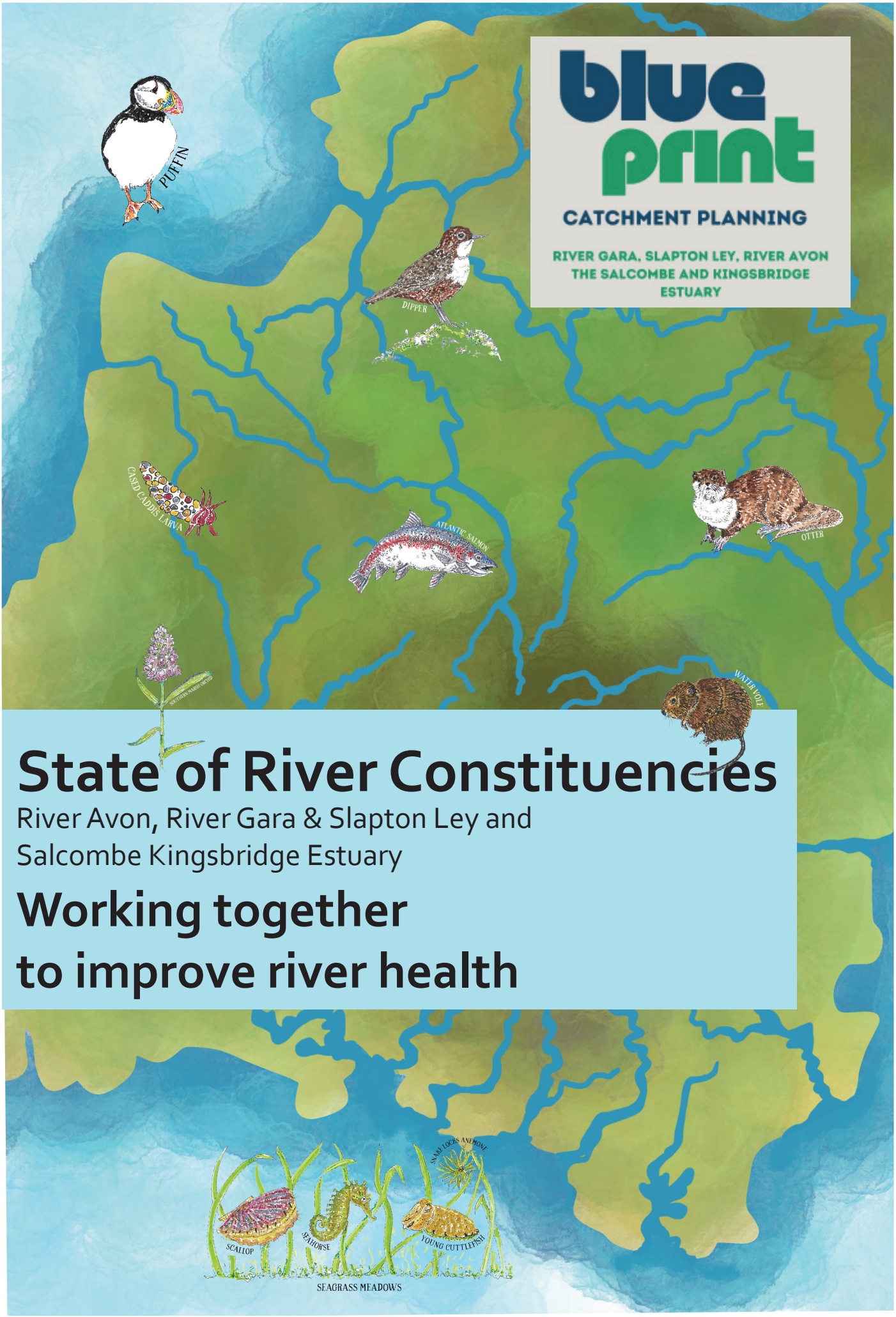


blue print

CATCHMENT PLANNING

RIVER GARA, SLAPTON LEY, RIVER AVON
THE SALCOMBE AND KINGSBRIDGE
ESTUARY

State of River Constituencies

River Avon, River Gara & Slapton Ley and
Salcombe Kingsbridge Estuary

Working together to improve river health

River Constituencies

Blue Print Project riparian parishes for proposed Inter-Parish Water Quality Groups

River Avon Catchment

- Halwell
- Moreleigh
- Bigbury
- Ringmore
- Aveton Gifford
- Churchstow
- Loddiswell
- Woodleigh
- Dean Prior
- Diptford
- North Huish
- South Brent

Salcombe Kingsbridge Estuary

- Kingsbridge
- Buckland-Tout-Saints
- Charleton
- East Allington
- Frogmore and Sherford
- Malborough
- Salcombe
- South Huish
- South Milton
- Thurlestone
- West Alvington

River Gara & Slapton Ley

- Slapton
- Strete
- Blackawton
- Stoke Fleming

Blue Print Project Wards

Allington and Strete
Cllr Laurel Lawford

- Buckland-Tout-Saints
- Charleton
- East Allington
- Frogmore and Sherford
- Slapton
- Strete

Blackawton and Stoke Fleming
Cllr Simon Rake

- Blackawton
- Stoke Fleming
- Halwell
- Moreleigh

Charterlands
Cllr Bernard Taylor

- Bigbury
- Ringmore

Kingsbridge
Cllr Denise O'Callaghan Cllr Susan Jackson

- Kingsbridge

Loddiswell and Aveton Gifford
Cllr Lee Bonham

- Aveton Gifford
- Churchstow
- Loddiswell
- Woodleigh

Salcombe and Thurlestone
Cllr Samantha Dennis Cllr Mark Long

- Malborough
- Salcombe
- South Huish
- South Milton
- Thurlestone
- West Alvington

South Brent
Cllr David Hancock Cllr Guy Pannell

- Dean Prior
- Diptford
- North Huish
- South Brent

Stokenham
Cllr Julian Brazil

- Chivelstone
- East Portlemouth
- South Pool

The State of River Constituencies in

River Avon, River Gara & Slapton Ley and Salcombe Kingsbridge Estuary

Contents

Executive Summary

How bad is river and estuary pollution in the River Constituencies of River Avon, River Gara & Slapton Ley and Salcombe Kingsbridge Estuary?

River Constituencies.

The SHDC Wards of **Allington & Strete, Blackawton & Stoke Fleming, Charterlands, Kingsbridge Loddiswell & Aveton Gifford, Salcombe & Thurlestone and South Brent** span the Blue Print Project river catchments. **Caroline Voaden MP** represents all constituents in these catchments. We describe these areas as 'river constituencies' to emphasise the role of local and national government in restoration of our water bodies to Good Ecological status by 202

Ecological status

The Environment Agency (EA) classifies the **ecological status** of **Rivers** by measuring a wide range of biological and chemical factors over a 6 year period. The status could be Excellent, Good, Moderate, Poor or Bad. The next classification update is due in 2025.

Water Framework Directive - 2027 target

The **Water Framework Directive** will not permit a whole river to be designated of Good Ecological status unless all water bodies and parameters assessed, including 'forever chemicals', achieve 'good' ecological status. These forever chemicals have now been banned but the EA estimates that it will take until 2063 for these chemicals to dissipate. It is a misconception that our government pushed back the EU legally binding targets for all rivers to be of good ecological status from 2027 to 2063. The target for resolution of pollution from other sources (agriculture, SWW, urban and transport) remains 2027, but there is little evidence of concerted effort to meet this target.

This review has collated the detailed local information needed for our MP, catchment community groups, local government and environmental organisations to collaborate to meet the legally binding 2027 target.

Catchment based approach

A catchment based approach to improving river health is essential because what happens upstream can affect the ecological status downstream.

	Poor	Moderate	Good	Excellent
Dart, Start Bay & Torbay 3 Blue Print water bodies) Tor Bay Water Body Dart Estuary Water Body	1	2	0	0
Avon, Salcombe & Kingsbridge River basin (7 water bodies) Avon Estuary Salcombe Harbour Kingsbridge Estuary	0	6	4	0
Total (%)	**1 (8%)**	**8 (62%)**	**4 (30%)**	**0 (0%)**

Table 1: Total individual water bodies in each (Blue print sections) of the EA Operational Catchments classified as Poor, Moderate, Good or Excellent Ecological status (2023) Ref EA Catchment Explorer (2023)

Reasons for Not Achieving Good (ecological status) RNAG

The EA Catchment Explorer indicates the **Sectors responsible** for the failure to achieve good ecological status and the activities of that Sector which have led to this. Full details on all sources of pollution can be found in the tables and links provided in this review.

58% of the RNAG is attributed to AGRICULTURE
42% of the RNAG is attributed to SOUTH WEST WATER

Water bodies	Agriculure RNAG	SWW RNAG
Dart, Start Bay & Torbay 26 water bodies) Tor Bay Water Body Dart Estuary Water Body	8	6
Avon, Salcombe & Kingsbridge River basin (7 water bodies) Avon Estuary Salcombe Harbour Kingsbridge Estuary	11	8
Total RNAG and (%) of Agric +SWW	19 (58%)	14 (42%)

Table 2: : Sectors responsible for RNAG in water bodies within the 'Blue Print Project' Management Catchments. Ref EA Catchment Explorer (2023)

Catchment Sensitive Farming

Catchment Sensitive Farming is a government funded project which aims to reduce diffuse water pollution from agriculture. No targets or time-lines have been published. All interactions with farmers are confidential. Progress is not sufficiently urgent to meet the 2027 target for Good Ecological status.

E-DNA analysis

The relative importance of agriculture and SWW as sources of pollution can be determined by **eDNA water quality analysis** **of** *E. coli* **and** *Enterococcus* in water samples above or below treatment works or farms along a river. Some community groups are now undertaking eDNA analysis themselves in order to develop a collaborative community plan to identify, prioritise and address the pollution issues in their local water bodies.

Inter-parish water quality groups.

The proposed **inter-parish water quality groups** formed by riparian parish councils could be a potential source of funding for such surveys and collaborative projects to support farmers wanting to install nature-based solutions and covered slurry tanks to prevent further local pollution.

Combined Sewer Overspills (CSO)

Total spill hours by SHDC Ward (2023) Total CSO spill events and event duration (total) hours

Allington & Strete:	766 spills	9,122 hours
Blackawton & Stoke Fleming	342 spills	4,763 hour
South Brent	295 spills	3,120 hours
Stokenham	179 spills	2,393 hours
Salcombe & Thurlestone	343 spills	2,384 hours
Charterlands	69 spills	1,474 hours
Loddiswell & Aveton Gifford	104 spills	260 hours
Kingsbridge	58 spills	154 hours

Caroline Voaden MP: River Constituency includes river catchments for Avon, Gara, Slapton Ley, Dart, Erme and Kingsbridge Salcombe Estuary

Total of 5,206 spills Total duration of 52,226 hours

Hydraulic capacity and on-going investigations

In the Blueprint Project catchments the following reasons have been given for high sewage overspills

On-going investigation (15 treatment works)	1,570 events	17,263 total hours
Hydraulic capacity : (Blackawton and South Milton)	206 events	3,131 total hours
Performance Infiltration : (Loddiswell)	95 events	118 total hours

This review is provided to enable our District Councillors, MP and local catchment groups to more easily navigate the complex issues and data relating to the ecological status of our rivers in the Catchments of the Blue Print Project.

Blue Print Project

Three community-led organisations in these catchments (Avon River Champions, Sustainable Blackawton and Friends of Salcombe Kingsbeidge Estuary) have teamed up to develop a programme of inter-parish activities in a catchment based approach that ensures the ecological status of our water bodies can be restored to 'Good Ecological" status by 2027. We are awaiting the outcome of a bid for £138,000 to the Water Restoration Fund to facilitate the design of the Blue Print catchment plans.

- Avon River Champions
- Sustainable Blackawton
- Friends of Salcombe Kingsbridge Estuary

BLUE PRINT PROJECT STEERING GROUP

SEADREAM EDUCATION

CONSERVATION & REGENERATION
FORCE4NATURE
VOLUNTEERS

AVON
RIVER CHAMPIONS

FoSKE
Friends of the Salcombe-Kingsbridge Estuary

@Sustainable Blackawton

HU
Communication & Marketing

PML | Plymouth Marine Laboratory

The State of River Constituencies Call to Action

Blue Print Project catchments

We urgently need to start developing an enabling, collaborative engagement programme to **restore river health by 2027.** This will require all sectors to understand how their habits and business practices are contributing to the escalating pollution of our rivers and estuaries.

The Blue Print steering group invites riparian stakeholders to support it aims and contribute to the design of catchment plans to control pollution.

Blue Print aims to:

1. Inspire widespread **empathy with the aquatic life** in our rivers and estuaries to prioritise actions to ensure they thrive.

2. Elicit a paradigm shift in **river-sensitive use of our sewage and drainage systems** by all sectors to prevent undue pressure on waste water and sewage treatment works during exceptional weather or high seasonal influx of visitors.

3. Develop **effective modes of communication** with all sectors of our River Constituencies.

4. **Regularly share** with stakeholders the **water quality data** from the Environment Agency (RNAG), Event Duration Monitoring data from SWW and e-DNA data on the relative importance of SWW and agricultural sources of pollution.

5. Create an **enabling environment** where all **stakeholders take responsibility** for their failures to control pollution; polluters are **held to account** by regular public reports of e-DNA water quality analysis and community volunteers undertake practical action to support farmers to install nature-based solutions to pollution.

6. **Celebrate River Champions** in all sectors

First Steps

1. The Blue Print Project steering group is calling our SHDC Ward Councillors and riparian parish councils to collaborate through **Inter-Parish Water Quality** groups (IPWQ) in the 'river constituencies' of the:

   - River Avon
   - River Gara and Slapton Ley
   - Salcombe Kingsbridge Estuary

   (see page 1)

2. Encourage IPWQ groups to **scrutinise the information** in this review on the ecological status (2023) and the RNAG of the water bodies within the River Constituency of IPWQ groups.

Next Steps

1. Encourage stakeholder attendance at the proposed **Blue Print Catchment Summits**

2. Promote involvement on the collaborative development of **community-led catchment plans** to control the pollution of our rivers and estuaries

3. Engage with SWW to prioritise capital investment in improved hydraulic capacity where eDNA data confirms the scale of pollution from SWW treatment works.

Dr Juliette Jackson
Blue Print Project Lead
CEO Seadream Education CIC

Collaboration LOCAL CATCHMENT PLANS

Blue Print Project proposes to engage all sectors in three **Catchment Summits** to review the local evidence and identify opportunities for practical interventions and behaviour change that will prevent pollution of our rivers. See below, suggested discussion points for each sector to consider.

South West Water

- Meet annually with Blue Print Project catchment IPWQ groups to develop a **collaborative approach** to problem solving and review progress against agreed improvement targets.
- Produce and distribute guidelines on the **river-sensitive use of our sewage and drainage system**s by homes, holiday homes, businesses, planning departments in local government and farms.
- Provide households with **rainwater catchment tanks** to prevent storm water from roofs swelling the volume of water that could create higher CSO spills hours.
- Provide **detailed (AMP 8) investment plans** for Blue Print Project waste water and sewage treatment works featuring in this review.
- Provide a timetable for achievement of the SWW Performance Indicator (AMP 8) for less than **20 hours CSO per asset per year** for each of the SWW assets in Blue Print Project catchments.
- Collaborate with local farmers & landowners to finance **Nature Based Solutions** where it is not possible to increase the hydraulic capacity of the sewage and water treatment works.
- Provide SHDC Development Management Committee and SW Devon Joint Local Plan officers with comprehensive, readily available data on **spare hydraulic capacity and household equivalents**, for every SWW asset in the Blue Print Project catchments.
- Make **Dry Spill Events monitoring with flow rates** (as well as hours of spills) easily available in the public domain for every SWW asset in the Blue Print Project catchments.

Farmers & landowners

- Talk to farming neighbours about what you could do collectively.
- Link up with local community catchment group to make a joint plan.
- Prioritise Nature-Based Solutions to reduce agricultural pollution of our rivers
- Ensure nitrate and phosphate fertiliser applications do not enter our water bodies
- Ensure pesticide applications do not enter our water
- Prevent soil / river bank erosion and run-off into rivers
- Prevent farm animals having access to tributaries and rivers and provide alternative water sources.

Households and businesses

- Join local **river community group** to monitor health of our rivers and wildlife
- Volunteer to install nature based solutions on farms.
- Invest in **Sustainable Drainage Solutions** to prevent rainwater from roofs and drains from increasing the hours of sewer overspills.
- Ensure sinks and drains are not used for rubbish disposal.
- Only flush **poo, pee and paper** down the loo, ensure wet wipes, condoms, sanitary wear and cigarette butts go in the bin
- Use **phosphate-free** detergents, shampoos and other beauty products.
- Ensure paints, solvents and other forever

Local Government

- Consult SWW on all planning applications, whether or not they are a Statutory Consultee.
- Take **hydraulic capacity** of treatment works into account on all planning decisions.
- Ensure **Sustainable Drainage Solutions** are applied to all planning applications.
- Identify **funding opportunities** for design and delivery of catchment plans.
- Form I**nter-parish water quality groups** to support local river community group projects
- Promote river-sensitive business practice and lifestyles

Collaboration
Inter-Parish Water Quality Groups

The many tributaries that feed into a main river may pass through several riparian parishes. Pollution sources upstream could affect the ecological status of water bodies downstream. It makes sense to collaborate in a catchment-based approach to improving the ecological status of the whole local river system.

The formation of an **Inter Parish Water Quality Group** with a representative councillor from each parish council will enable this to happen.

Riparian parish councils have already collaborated in the **River Erme** and **River Yealm** catchments in South Hams to regularly review water quality data produced by community groups working within the catchment as a whole. They meet twice per year. This enables them to have an informed view of the level of pollution caused by South West Water's Combined Sewer Overspills, agricultural pollution and pollution from local industry or roads.

Inter Parish Water Quality Groups can:

- Facilitate their local community groups focussing on water quality by providing funding for monitoring equipment, training, analysis and public awareness events and public engagement activities.
- Raise the profile of river-sensitive lifestyles and catchment-sensitive farming with parishioners.
- Escalate any concerns through the District Council and County Council representatives who attend all normal monthly parish council meetings.
- Request meetings with SWW and farmers to discuss local solutions to pollution.
- Liaise with volunteer groups to assist farmers install nature-based solutions to agricultural pollution

Campaign issue
HM Government has not yet made water companies **Statutory Consultees** for planning applications even though additional housing will inevitably overload the sewage system and contribute to river pollution.

However, this does not prevent parish and district councils from pro-actively considering the published Hydraulic Capacity of SWW treatment works into consideration when deciding on planning applications.

Councils can request SWW to provide information about

Councillors can request SWW to provide information about the estimated spare hydraulic capacity and the number of dwellings each treatment work is capable of serving.

An estimate from information, readily available to SWW, is sufficient for planning purposes without the need for detailed hydraulic analysis which will cause delays.

Sustainable Drainage Systems

Catchment-sensitive planning decisions by local government should pay greater attention to Sustainable Drainage systems and could promote the retrofitting of SuDS where local sewage and waste water treatment works are known to be inadequate.

Alarm bells should ring if a proposed new development intends to connect with a combined sewer drainage system that will flow through a SWW treatment works which is already recording unacceptable CSO events.

Closer attention to Sustainable Drainage Plans for all planning applications connected to water bodies where the RNAG is due to SWW sewage treatment works having insufficient hydraulic capacity - will ensure drainage plans do not add to pollution.

Collaboration

Environmental Organisations

Devon Wildlife Trust - Avon Valley Project
The Avon Valley Project works with landowners in the Blue Print Project catchment to establish species-rich meadows and improve riparian habitats which help to reduce agricultural run-off and protect our river banks.

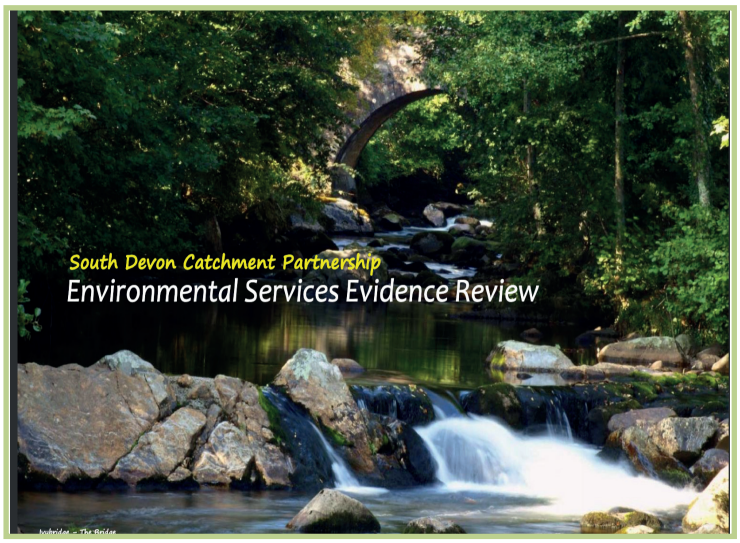
South Devon National Landscapes
Farming in Protected Landscapes (FiPL) employs a dedicated f**arm engagement office**r to work with farmers in our Blue Print Project catchment to consider more environmentally sensitive farming practice and assist in grant funding to facilitate this. The SDNL e**stuaries officer** provides stakeholders with information and advice on issues and actions affecting aquatic life in our water bodies.

Woodland Trust and Moor Trees
These organisations provide expert advice, inputs and opportunities for volunteers to assist farmers and landowners with the installation of nature based solutions to pollution.

Catchment Based Approach (CaBA)
CaBA was established just over 10 years ago by Defra in order to embed a collaborative approach to land and water management across England.

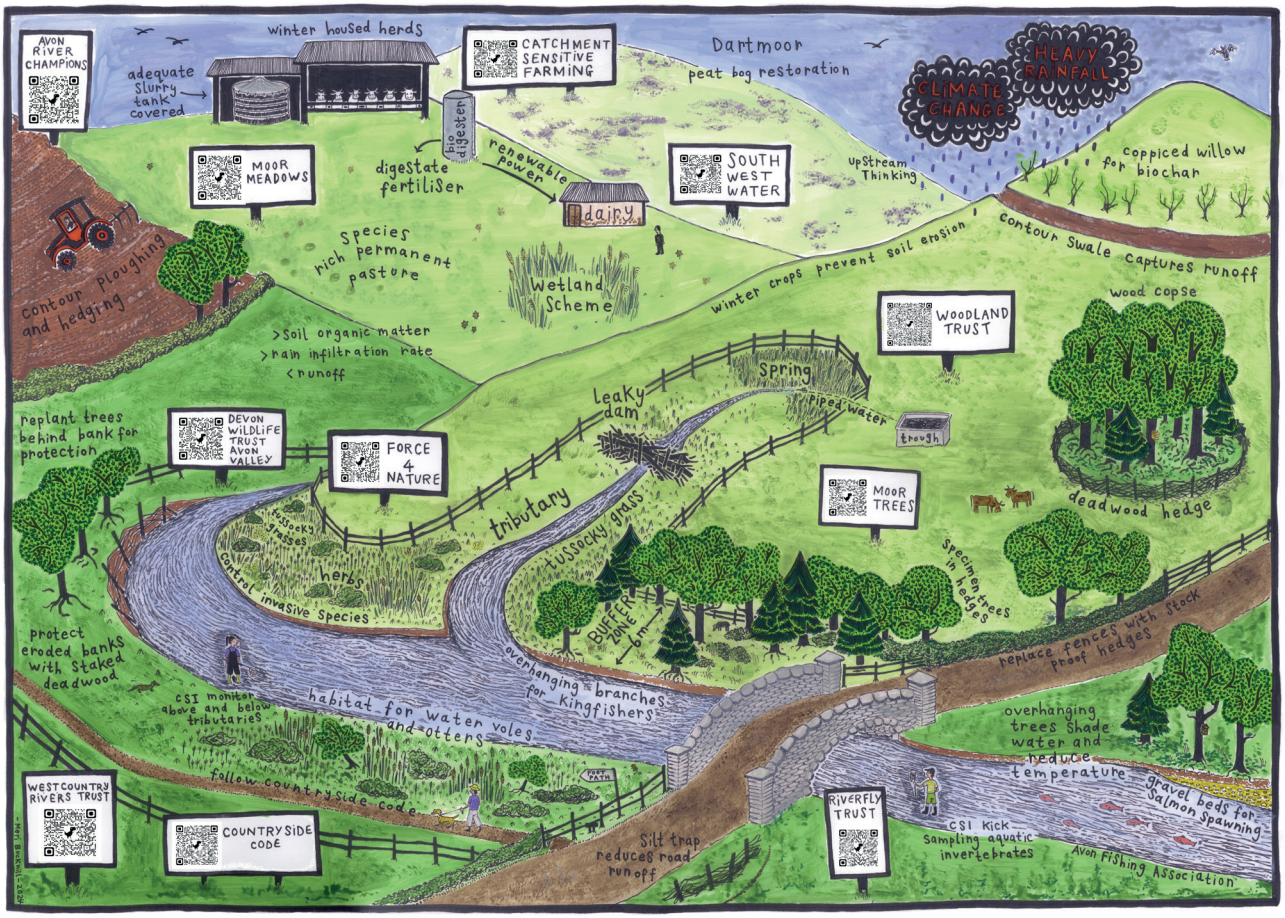
The South Devon Catchment Partnership delivers CaBA and includes organisations such as the Environment Agency, South Devon National Landscapes, Westcountry Rivers Trust, Devon Wildlife Trust, SWW, fisheries associations, landowners and river catchment community groups.

CaBA's model is expected to bring local knowledge and expertise to bear, empowering individuals, organisations, and communities to take ownership of local issues and providing the catalyst to implement cost-effective delivery on the ground. Improvements to water quality, reduced flood risk, increased climate resilience, nature recovery and more sustainable businesses are all part of this integrated approach.



This is a high level regional project linking established expert organisations in order to develop **landscape scale catchment plans** which **prioritise certain areas** and habitats.

The CaBA programme and the proposed Blue Print Project are complementary because the Blue Print Project catchments are not currently priority areas for the CaBA programme.



Collaboration Volunteer Groups

Devon Wildlife Trust, Woodland Trust and Force4Nature offer well-organised opportunities for volunteers to join in physical activities aimed at improving biodiversity and reducing pollution of our rivers.

This is an enjoyable way for communities to work together to solve our local problem. Pioneering farmers are now inviting such groups to work with them to install nature-based solutions to agricultural run off.

This is a critically important community endeavour to design and implement a small local catchment plan and implement it.

Farmers can play a leading role in delivering good ecological health to our rivers. Communities can volunteer and fund raise to show their respect for farming families who are the custodians of our landscape and the key workers who produce the food we eat.

Table 3: Blueprint water bodies within the Operational Catchment of DART, START BAY & TORBAY

River basin water bodies (3)

Reasons for Not Achieving Good Ecological Status 2023
Polybrominated diphenyl ethers (PBDE) & mercury compounds applies to **all** water bodies

River water bodies	Eco status	Agriculture (8) RNAG 2023	SWW (6) RNAG 2023	Other Sectors (2)
Avon (Devon Tidal) Sth Hams - Slapton	POOR	poor nutrient management	sewage discharge (continuous)	
		poor livestock management		
		poor soil management		
Slapton Ley	MODERATE	poor livestock management (2)	sewage discharge (continuous) (2)	septic tanks (2)
			sewage discharge (intermittent) (2)	
The Gara	MODERATE	poor nutrient management	sewage discharge (continuous)	
		poor livestock management		
		poor soil management		

Table 4: Blueprint water bodies within the Operational Catchment of AVON SALCOMBE & KINGSBRIDGE

River basin and Estuary water bodies

Reasons for Not Achieving Good Ecological Status 2023
Polybrominated diphenyl ethers (PBDE) & mercury compounds – applies to **all** water bodies

River water bodies	Eco status	Agriculture (11)	SWW (8)	Other Sectors
Avon (DevonTidal) Sth Hams - Frogmore	MODERATE	riparian/in-river activities (inc bankside erosion	sewage discharge (continuous)	
Avon - Lower	GOOD			
Avon - Upper	GOOD			
Avon Dam Reservoir	MODERATE			Reservoir / Impoundment - non flow related
Small Bk	GOOD			
Torr Bk	MODERATE	poor nutrient management	sewage discharge (continuous)	
		poor livestock management		
		poor soil management		
Upper Avon	MODERATE			Natural conditions

ESTUARIES				
Avon Estuary	GOOD			
Kingsbridge Estuary	MODERATE	poor nutrient management (2)	sewage discharge (continuous) (3)	Urbanisation - urban development
		poor livestock management (2)	sewage discharge (intermitent) (3)	
		poor soil management (3)		
Salcombe Harbour	MODERATE			

Table 5: Sewer Overspills in Blue Print River Constituencies by SHDC Wards (2023)

Location	Trt works	No. events	Total spill hrs	Spilling into water body	Discharge Permit No.	SHDC Ward
East Allington	WWTW	**76**	**1,251**	Small Brook	SWWA 852	Allington & Strete
Slapton	WWTW	**97**	**1,417**	Start Bay / Slapton Ley	203034	Allington & Strete
East Charleton	PS	**49**	**953**	Tributary Frogmore Creek	201660	Allington & Strete
West Charleton	STW	**70**	**484**	Charleton Stream	203206	Allington & Strete
Kimberleigh Nurseries	SSO	**80**	**95**	The stream	201721	Allington & Strete
Strete	WWTW	**83**	**837**	Start Bay	203410	Allington & Strete
Sherford	WWTW	**262**	**3,132**	Sherford Stream	NRA-SW-6171	Allington & Strete
East Charleton	PS	**49**	**953**	Tributary Frogmore Creek	201660	Allington & Strete
TOTAL		**766**	**9,122**			Allington & Strete
Blackawton	STW	**113**	**1,619**	Blackawton Stream	NPSWQD0069 16	Blackawton & Stoke Fleming
Moreleigh	STW	**135**	**1,665**	Tributary of Torr Brook	NRA-SW-6964	Blackawton & Stoke Fleming
Stoke Fleming	PS	**94**	**1,479**	Cove Stream	203363	Blackawton & Stoke Fleming
Salcombe & Thurleastone		**342**	**4,763**			Blackawton & Stoke Fleming
Brent Mill CSO	CSO	**42**	**179**	River Avon	201720	South Brent
Diptford	STW	**122**	**876**	River Avon	200400	South Brent
South Brent	WWTW	**131**	**2,065**	River Avon	DRA 1062	South Brent
TOTAL		**295**	**3,120**			South Brent
East Prawle	STW	**146**	**1,791**	coastal stream	202193/CS/01	Stokenham
Torcross	PS	**33**	**602**	Start Bay	203035	Stokenham
TOTAL		**179**	**2,393**			Stokenham

Table 5: (cont) Sewer Overspills in Blue Print River Constituencies by SHDC Wards (2023)

Location	Trt works	No. events	Total spill hrs	Spilling into water body	Discharge Permit No.	SHDC Ward
Malborough Ejector Ps	SSO	**36**	**189**	Trib Of Blanksmill Creek (S).	203408	Salcombe & Thurlestone
Baston Green	PS	**48**	**388**	Baston Creek	NRA-SW-7652/PC/1	Salcombe & Thurlestone
Quillettes	CSO	**43**	**26**	Tributary Of Combe Stream.	NRA-SW-7653/CS/1	Salcombe & Thurlestone
Comminutor House	SSO	**123**	**269**	Shadycombe Creek - Salcombe	003218/CS/01	Salcombe & Thurlestone
South Milton	STW	**93**	**1,512**	South Milton Stream	NRA-SW-3548	Salcombe & Thurlestone
TOTAL		**343**	**2,384**			Salcombe & Thurlestone
Bigbury & Challaborough Bay	STW	No data	No data	Bigbury Bay	200261/FN/01	Charterlands
Burgh Island Hotel	Private STW	No data	No data	Bigbury Bay	: 3052/8/5	Charterlands
Ringmore	STW	**69**	**1,474**	Ringmore Stream		Charterlands
TOTAL		**69**	**1,474**			Charterlands
Aveton Gifford	WWTW	**9**	**72**	Avon River Estuary	201967	Loddiswell & Aveton Gifford
Loddiswell	WWTW	**95**	**188**	River Avon	DRA 1349	Loddiswell & Aveton Gifford
TOTAL		**104**	**260**			Loddiswell & Aveton Gifford
Prince of Wales	CSO	**58**	**154**	Kingsbridge Estuary	203437	Kingsbridge
TOTAL		**58**	**154**			Kingsbridge
Blue Print TOTAL		**1,570**	**17,263**			

Table 6: Reason given by SWW for high spill count and hours 2023 :
HYDRAULIC CAPACITY

Location	Trt works	No. events	Total spill hrs	Spilling into water body	Discharge Permit No.	SHDC Ward
South Milton	STW	**93**	**1,512**	South Milton Stream	NRA-SW-3548	Salcombe & Thurlestone
Blackawton	STW	**113**	**1,619**	Blackawton Stream	NPSWQD0069 16	Blackawton & Stoke Fleming
TOTAL		**206**	**3,131**			

Table 7: Reason given by SWW for high spill count and hours 2023:
PERFORMANCE INFILTRATION

Location	Trt works	No. events	Total spill hrs	Spilling into water body	Discharge Permit No.	SHDC Ward
Loddiswell	WWTW	**95**	**188**	River Avon	DRA 1349	Loddiswell & Aveton Gifford
TOTAL		**95**	**118**			

Table 8: Reason given by SWW for high spill count and hours 2023:
FINAL TREATED EFFLUENT

Location	Trt works	No. events	Total spill hrs	Spilling into water body	Discharge Permit No.	SHDC Ward
Bigbury & Challaborough Bay	STW	No data	No data	Bigbury Bay	200261/FN/01	Charterlands
Burgh Island Hotel	Private STW	No data	No data	Bigbury Bay	: 3052/8/5	Charterlands

Tabke 9: Reason given by SWW for high spill count and hours 2023:
SENSOR FAILURE

Location	Trt works	No. events	Total spill hrs	Spilling into water body	Discharge Permit No.	SHDC Ward
Brent Mill CSO	CSO	**42**	**179**	River Avon	201720	South Brent
TOTAL		**42**	**179**			

Table 10 : Reason given by SWW for high spill count and hours 2023:
EXCEPTIONAL WEATHER

Location	Trt work	Number events	Total spill hrs	Spilling into water body	Discharge Permit No.	SHDC Ward
Ringmore	STW	**69**	**1,474**	Ringmore Stream		Charterlands
East Allington	WWTW	**76**	**1,251**	Small Brook	SWWA 852	Allington & Strete
Slapton	WWTW	**97**	**1,417**	Start Bay / Slapton Ley	203034	Allington & Strete
TOTAL		**242**	**4,142**			

Table 11: Reason given by SWW for high spill count and hours 2023:
NO REASON RECORDED

Location	Trt work	Number events	Total spill hrs	Spilling into water body	Discharge Permit No.	SHDC Ward
Aveton Gifford	WWTW	**9**	**72**	Avon River Estuary	201967	Loddiswell & Aveton Gifford
Malborough Ejector Ps	SSO	**36**	**189**	Trib Of Blanksmill Creek (S).	203408	Salcombe & Thurlestone
Baston Green	PS	**48**	**388**	Baston Creek	NRA-SW-7652/PC/1	Salcombe & Thurlestone
East Charleton	PS	**49**	**953**	Tributary Frogmore Creek	201660	Allington & Strete
TOTAL		**142**	**1.602**			

Tabel 12: Reason given by SWW for high spill count and hours 2023:
ON-GOING INVESTIGATION

Location	Trt work	Number events	Total spill hrs	Spilling into water body	Discharge Permit No.	SHDC Ward
Diptford	STW	**122**	**876**	River Avon	200400	South Brent
South Brent	WWTW	**131**	**2,065**	River Avon	DRA 1062	South Brent
Moreleigh	STW	**135**	**1,665**	Tributary of Torr Brook	NRA-SW-6964	Blackawton & Stoke Fleming
Stoke Fleming	PS	**94**	**1,479**	Cove Stream	203363	Blackawton & Stoke Fleming
Quillettes	CSO	**43**	**26**	Tributary Of Combe Stream.	NRA-SW-7653/CS/1	Salcombe & Thurlestone
Comminutor House	SSO	**123**	**269**	Shadycombe Creek - Salcombe	003218/CS/01	Salcombe & Thurlestone
West Charleton	STW	**70**	**484**	Charleton Stream	203206	Allington & Strete
East Charleton	PS	**49**	**953**	Tributary Frogmore Creek	201660	Allington & Strete
Kimberleigh Nurseries	SSO	**80**	**95**	The stream	201721	Allington & Strete
Strete	WWTW	**83**	**837**	Start Bay	203410	Allington & Strete
Sherford	WWTW	**262**	**3,132**	Sherford Stream	NRA-SW-6171	Allington & Strete
Prince of Wales	CSO	**58**	**154**	Kingsbridge Estuary	203437	Kingsbridge
East Prawle	STW	**146**	**1,791**	coastal stream	202193/CS/01	Stokenham
Torcross	PS	**33**	**602**	Start Bay	203035	Stokenham
TOTAL		**1,570**	**17,263**			

APPENDIX

Glossary & Abbreviations

Asset Management Plan (AMP)
The asset management plan period was introduced as a result of the privatisation of the water industry in England and Wales. The AMP periods are linked to the regular **price reviews** used by the Water Services Regulation Authority (Ofwat) to set the allowable price increase for consumers

Combined Sewer Overspill (CSO)
CSOs occur when two drainage systems (for drainage water and sewage water) combine into one pipework system and the larger volume is in excess of the hydraulic capacity of the sewage treatment works. The excess is released, untreated, into the river to avoid it being forced back into the bathroom.

Citizen Science Investigation (CSI)
Trained, but unqualified, people taking samples in a prescribed manner to collect observations on a natural parameter (e.g. water quality or presence of flora/fauna etc.).

Dry Weather Flow (DWF)
DWF is the average daily flow to a waste water treatment works (WWTW) during a period without rain. Applications for Discharge Permits must predict the DWF.

Environment Agency (EA)
The EA is the UK regulatory body which, amongst other things, issues Discharge Permits and monitors the Ecological status of water bodies.

Ofwat
The Water Services Regulation Authority, or Ofwat, is the body responsible for economic regulation of the privatised water and sewage industry in England and Wales. Ofwat's main statutory duties include protecting the interests of consumers, securing the long-term resilience of water supply and wastewater systems, and ensuring that companies carry out their functions and are able to finance them

Price Review (PR)
The prices which water companies can charge customers is reviewed every 5 years and agreed with **Ofwat.** This is the outcome of the **AMP.**

Reason for Not Achieving Good (RNAG)
The EA data on the Ecological status of water bodies must indicate the RNAG Ecological status.

Sewage Treatment Works (STW)
These assets will treat sewage from toilets and may also be mixed with other waste water from drains and sinks.

South West Water (SWW)
SWW is the water company that provides sewage and waste water treatment servcges and drinking water supplies.

Site of Special Scientific Interest (SSSI)
These are protected areas in the UK that are nationally important for their natural features, including plants, animals, geology, and landforms. They are legally protected to safeguard their existence and to protect the country's natural environment from development, pollution, and climate change.

Waste Water Treatment Works (WWTW)
These assets treat domestic waste water from sinks and drains making it safe to return to the river.

Westcountry Rivers Trust (WRT)
WRT is a charity set up to protect our rivers and promote engagement with the flora and fauna within them.

Evidence
Regulatory

Campaign issue:
Full transparency and fines in relation to the scale of pollution by South West Water requires **volume of CSOs** to also be reported to the public and acted upon by the Environment Agency.

Currently only the hours of CSO spills is published

Campaign issue:
Designated Bathing Water (DBW) status does not guarantee improved water quality. It is an intensive water monitoring programme by the EA

To have an impact this additional monitoring must address the inherent failures of the EA to enforce the law and ensure polluters invest in pollution prevention.

Budget cuts to EA have resulted in a smaller team of water monitoring officers. There are concerns that if DBW is prioritised, this will reduce, even further, the EA monitoring programme in rivers that is used to designate 'ecological status'.

EA Rivers data

EA Estuary data

Rivers Trust Sewage Map

Designated Bathing Waters

EA Swimfo

Community groups can identify pollution hotspots in their catchments to prioritise their interventions. The main sources of public information are:

- The Environment Agency's **Catchment Data Explorer** which determines the Ecological Status of our water bodies in rivers within larger **Operational Catchments**:
- The data for Estuary waters (Taw Torridge) is published on the **South West TraC Management Catchment** website.
- The **Rivers Trust Sewage Map** collates data provided by the water companies (which self -report) on the number of combined sewer overspills (CSOs) and the duration in hours. This data does not currently include the volume of the pollution.

Operational Catchments
There are 2 EA 'Operational Catchments' of relevance to this review.

- Dart Start Bay and Torbay
- Avon Salcombe and Kingsbridge

Water Bodies
Each Operational Catchment is divided up into sections called 'water bodies' which are monitored separately by the EA. Each water body has a unique ecological classification.

Designated Bathing Waters
There are 26 Designated Bathing Waters in South Hams, where the EA is required to take weekly water samples from May to October and provide sites annually with a Designated Grade based on the worst and best scores for the last four years. (Blue Print area DBW in **bold**)
Bantham, Bigbury-on-Sea North, Bigbury-on-Sea South, Blackpool Sands, Bovisand, **Challaborough,** Coastguards Beach, Erme Estuary, Dartmouth Castle and Sugary Cove, Dittisham, Dart Estuary, Hope Cove, Mill Bay, Mothecombe, **Salcombe North Sands, Salcombe South Sands, Slapton Sands Monument, Slapton Sands Torcross,** Steamer Quay, Dart Estuary, Stoke Gabriel, Dart Estuary, **Thurleston North,** Thurleston South, Warfleet Creek, Dart Estuary Wembury

EA Swimfo site provides the daily warnings about pollution in a DBW.

REASONS for NOT ACHIEVING GOOD (ecological status) RNAG

EA Catchment Explorer data identifies the RNAG for all water bodies by:

SOURCE of pollution by **Sector Responsible**

Agricultural
South West Water
Urban & Transport
Domestic General Public

ACTIVITY which has resulted in pollution

- ***Agriculture -***
  poor nutrient management - Excess use of inorganic fertiliser on crops/pasture which has run off the land and into the river or application of organic fertilisers such as animal slurry to the land during the winter periods of high rainfall.
  poor livestock management - Inadequate fencing of animals to exclude them from a buffer zone along all tributaries or rivers, allowing them to defecate into the water body.
  Poor soil management - Failure to prevent soil run off by contour ploughing, contour swales, silt dams, leaky dams or lack of permanent pastures near rivers.
  Riparian and in-river activities including bankside erosion

- ***South West Water***
  sewage discharge (continuous)
  sewage discharge (intermittent)

- ***Private Sewage Treatment***
  sewage discharge (continuous)

- ***Septic Tanks***
  sewage discharge (continuous)

Campaign issue:
The data presented by the EA in the Catchment Explorer for RNAG does **not quantify the scale of the pollution** from each source (e.g. Agriculture or SWW sewage treatment works).

This makes it impossible to have meaningful discussions with the local polluter in order prioritise the interventions needed.

It also makes it impossible to apportion fines in relation to the scale of pollution.

Campaign issue:
Privately owned Septic Tanks are not regularly inspected by the EA to ensure that they are fit for purpose and are not overspilling into streams and tributaries.
e.g Septic tanks are one RNAG for Slapton Ley

Evidence
Discharge Permits

Water companies are only allowed to operate legally if they comply with their **Discharge Permits** which are agreed with the Environment Agency. The legally permitted amount of raw sewage that can be discharged into a river, is limited by a Discharge Permit to **7 milligrams** of **untreated sewage per litre of 'treated' effluent** and this level can only be exceeded twice per year before the water companies are fined.

Inadequate capital investment in treatment works over a prolonged period is the reason why water companies are failing to comply with their legally binding **Discharge Permits** resulting in illegal dry spills of sewage into rivers.

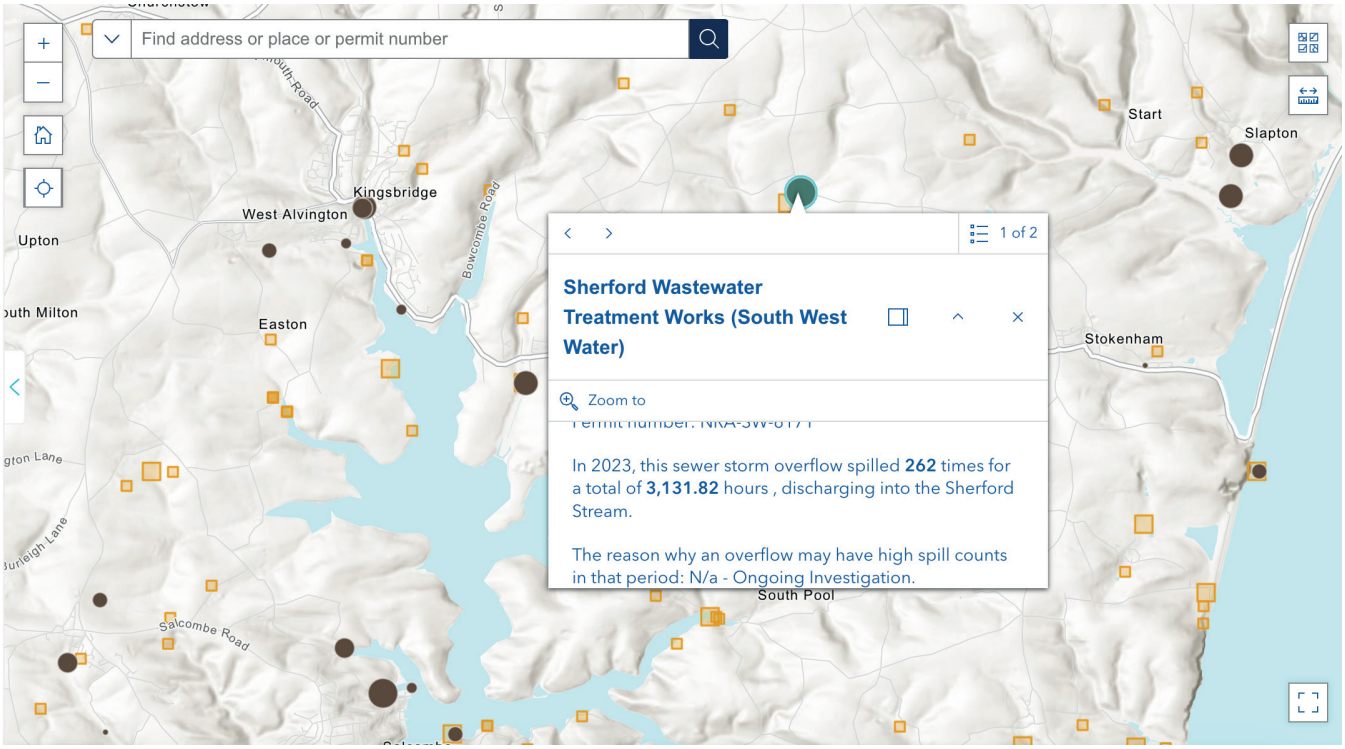
The Discharge Permit defines the **number of households** that each sewage treatment plant is designed to serve. The EA has failed to monitor and update the Discharge Permits even when the EA's own water quality data (RNAG) is given as inadequate **'hydraulic capacity'**(to serve the homes connected to the system).

Anyone can request a copy of a Discharge Permit

Campaign issue:
There are concerns that an over-emphasis by Ofwat on 'keeping customer bills low' may have compromised the ability of SWW to invest in their proposed annual capital expenditure on asset maintenance and asset improvement. Inflation will have increased the capital budgets now needed to remedy this historic failure and will be a significant factor in the expected huge customer bill increases in 2025

Fines are not high enough to influence capital investment priorities of SWW and capital investment is determined and constrained annually by agreement with Ofwat.

Campaign issue:
South West Water is currently under investigation by the EA for breaching the requirements of certain Discharge Permits. Fines can be imposed by EA for failure to comply. The 'burden of proof' to support enforcement action is too high to provide thorough oversight.

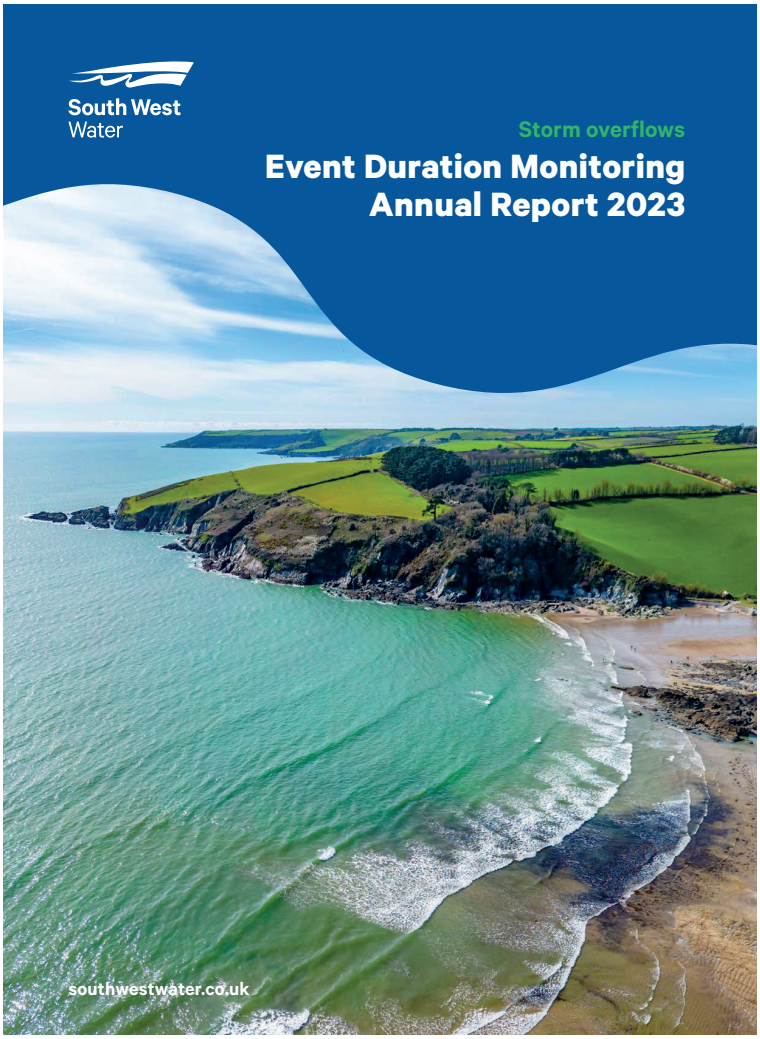


Evidence
Event Duration Monitoring

Water companies are now legally obliged to publish self-monitored data on the hours that they allow CSOs to occur and the time when this happened. This now makes it possible to monitor if the CSO occurred during a high rainfall event or not.

The EDM data is now published on the **Rivers Trust Sewage Map**.

On 18th November 2021 the Environment Agency and OFWAT announced major investigations into potential widespread non-compliance (with Discharge Permits) by water and sewage companies at sewage treatment works.



Campaign issue
It is not possible to determine the seriousness of the EDM data (hours of effluent spill) without also referring to the readings on the volume of the flow of effluent associated with each EDM reading.

Water companies must have this information and should be required to publish this.

The combined data would more accurately estimate the pollution caused and influence the levels of fines

Evidence- Combined Sewer Overspills

There are two types of SWW treatment works.

- **Waste water treatment works** - which take water from our sinks, roofs and drains
- **Sewage treatment works** which take what we put down the toilet.

Sometimes these two networks COMBINE to deliver a larger volume of effluent to the South West Water sewage treatment works.

Combined Sewer Overspills **(CSO)** into our rivers occur when SWW allows the higher volume of effluent to spill into the river without treatment.

SWW are permitted to allow CSOs to occur but only under specific conditions of their Discharge Permits. They must only occur during periods of **exceptional wet weather.**

If they did not allow CSOs to occur - the untreated sewage would overspill into our bathrooms.

Water companies are legally obliged to publish self-monitored data on the hours that they allow CSOs to occur and the time when this happened. This now makes it possible to monitor if the CSO occurred during a high rainfall event or not.

Annual CSO in local Constituencies (2023)

Caroline Voaden
Catchment Constituencies:
Avon, Gara, Slapton Ley, Dart, Erme and Kingsbridge Salcombe Estuary

SOUTH DEVON.
LIBERAL DEMOCRAT

Total of
5,206 spills
Total duration of
52,226 hours

Campaign issue
There is a lack of transparency about the 'On-going Investigations' and whether a high proportion of the 'on going investigations' are likely to be lack of sufficient 'hydraulic capacity'.

Campaign issue
There does not appear to be a time limit on how long 'on-going investigations' can take before a default reason of lack of 'hydraulic capacity' can be assumed and fines allocated accordingly.

Campaign issue:

CSOs are a permitted release valve ONLY when they occur during 'exceptionally heavy rainfall'.

But CSOs occur routinely at some treatment works during normal weather because SWW do not have the hydraulic capacity to serve the population connected to it.

The extent of this lack of 'hydraulic capacity' is masked by the huge number of '**on-going investigations**' which do not appear to be a priority or be keenly scrutinised by the EA and Ofwat.

Campaign issue:

There is a lack of transparency about reporting on the frequency of DWF for individual treatment works.

Campaigners are concerned that the EA is not able to intervene promptly and enforce action to prevent this happening even when the water company is in breach of Discharge Permits.

Evidence

Dry Weather Flows

DWF is the average daily flow to a waste water treatment works (WWTW) during a period without rain. Applications for Discharge Permits must predict the DWF. The Applicant is obliged to update the prediction if the population it serves increases or infiltration increases.

When an operator applies to increase the hours of DWF, the Environment Agency will usually require a number of changes to be made at the treatment works. A water company has three years to comply with requirements.

BBC Investigation

Campaign issue:

There is a highly concerning lack of transparency about the number of homes that a sewage treatment works has the capacity to serve, when this is a critical local authority planning issue for new developments.

All water companies have readily available information, for all their treatment works, about the estimated spare hydraulic capacity and the number of dwellings each is capable of serving. An estimate could be made available to local authorities without delay because a detailed hydraulic analysis is not needed.

In view of the unacceptable levels of CSOs, it is likely that SWW are collecting **standing charges for sewage treatment when they do not have the capacity to provide this service**.

Why have the EA and Ofwat not acted to prevent this happening?

Evidence - eDNA Analysis

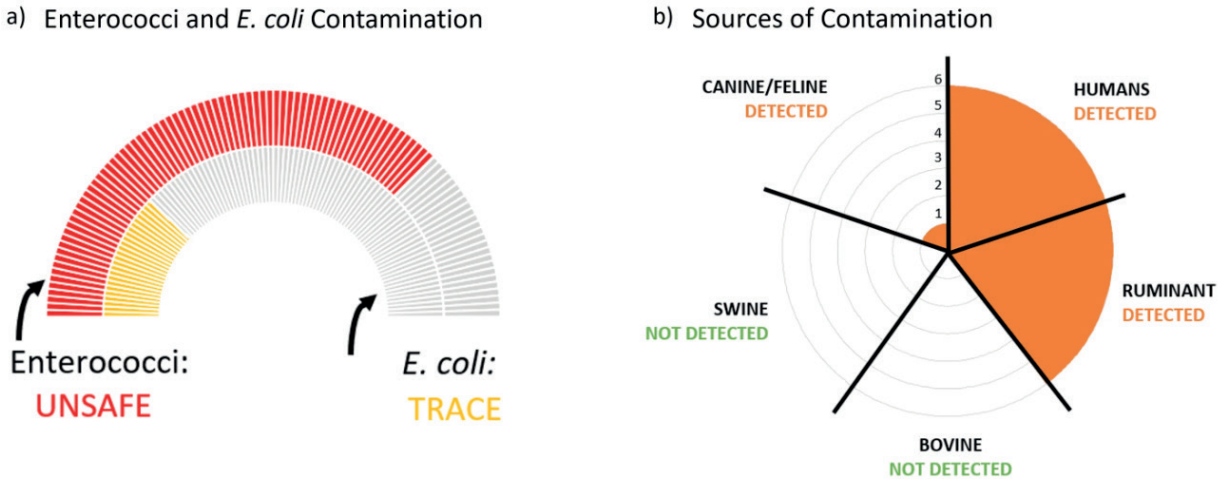
The EA Catchment Explorer data determines the "Reasons for Not Achieving Good" ecological status in our water bodies. A RNAG will state whether Agriculture or SWW is a source of this pollution but it does not quantify the relative importance of these sources, making it less obvious where interventions should be prioritised to solve the problem. The EA classification is also based on information obtained over 6 years and may not reflect the current situation.

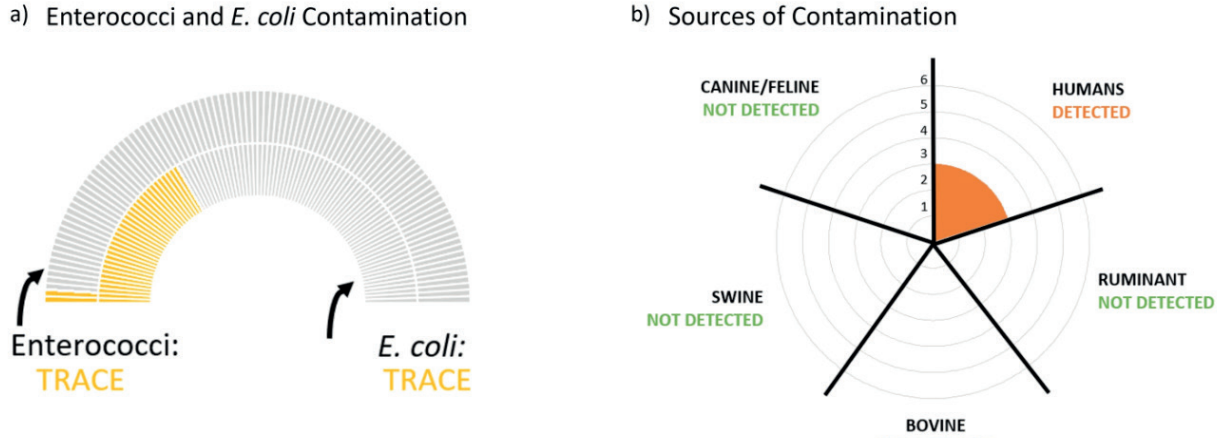
Faecal matter (poo) that enters the river can be from a wide range of animals or from humans. Bacteria present in the faecal matter has a different DNA fingerprint depending on which animal it came from. Therefore analysis of bacteria can determine the extent and source of the pollution. Faecal matter not only contains bacteria (which makes human water users ill) but is it also a major source of phosphate pollution which causes algal blooms and removes oxygen, causing fish to die.

Inter-parish water quality groups would be better informed of the relative importance of agriculture or SWW as a local pollution source by commissioning strategically sited, once-off **e-DNA analyses** of water samples. For example above and below a tributary running off agricultural land where grazing animals are not prevented from entering the water body or above and below a SWW waste water /sewage outlet. A more accurate picture could be obtained by undertaking eDNA analysis during low river flow rates in the summer and high flow rates in the winter

This data could form part of the evidence base for a public consultation on catchment plans for our water bodies - a **BLUEPrint**.

Diagram below: : The (top) e-DNA report indicates that the water company sewage treatment works and a local sheep farmer are equally responsible for unsafe levels of faecal pollution in this water body. **INTERVENTION PRIORITY** The (bottom) e-DNA report indicates that, whilst only human sewage pollution has occurred, it is not at unsafe levels. **INTERVENTION NOT A PRIORITY**

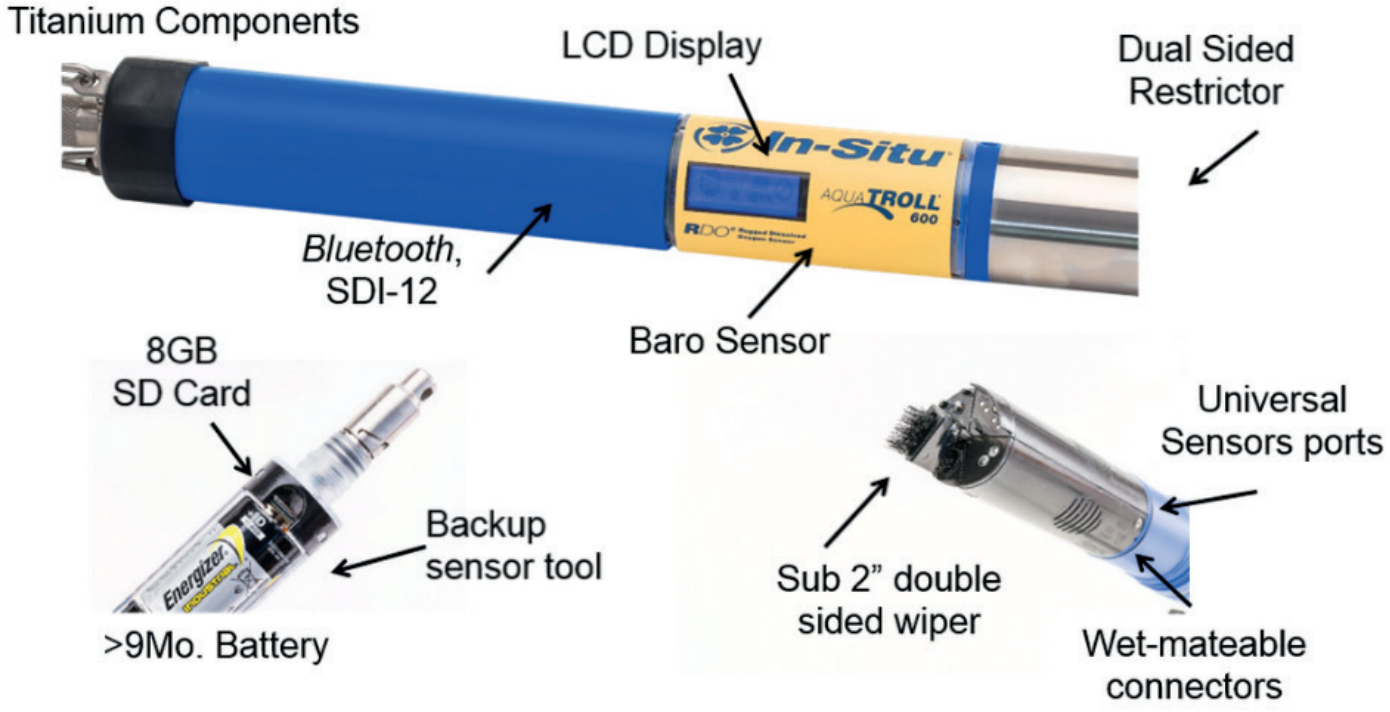




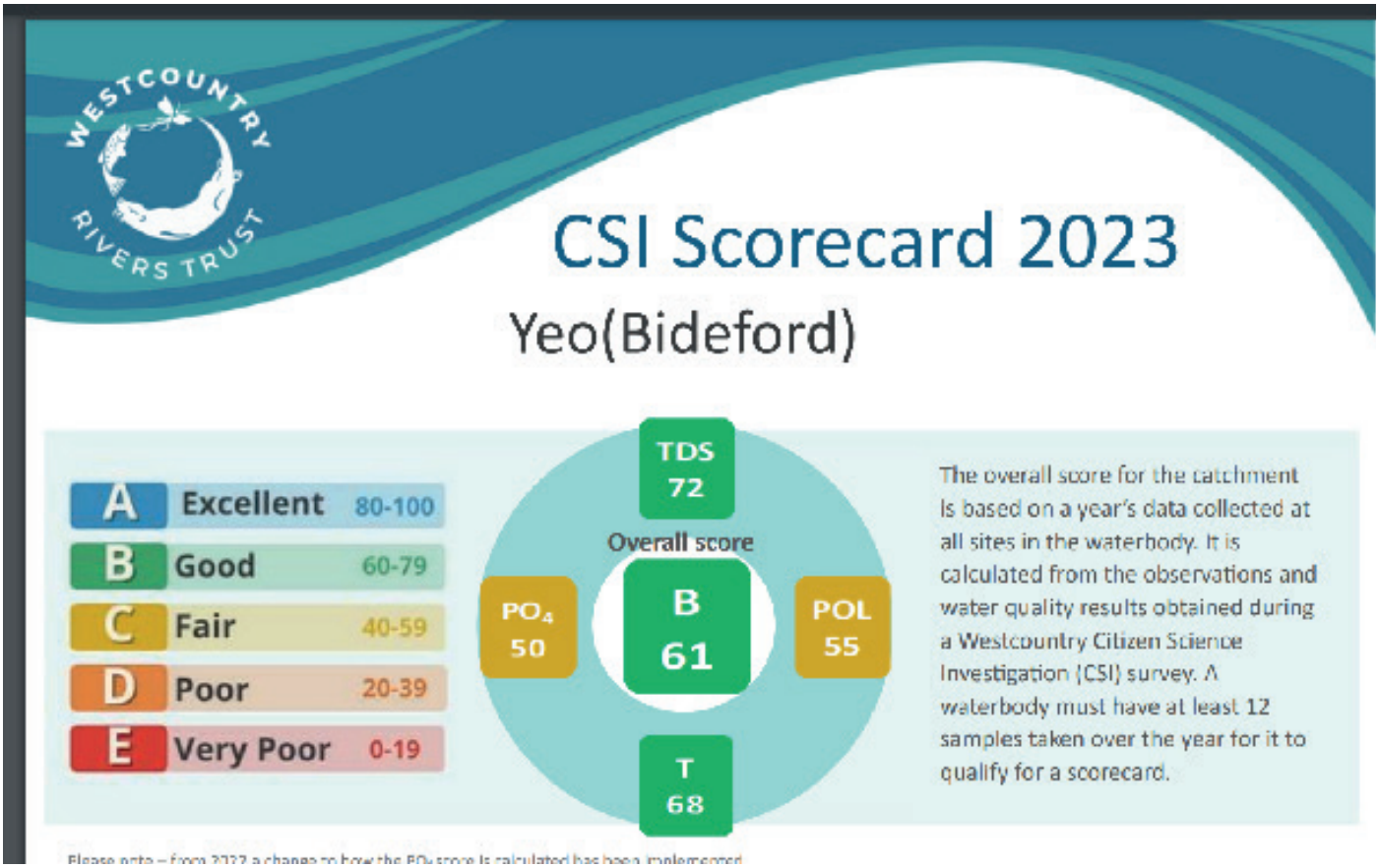
Evidence - Continuous Water Monitoring

Some catchments have formed I**nter-Parish Water Quality Groups** to fund the purchase of real-time water quality monitoring equipment such as the In-Situ sonde. The equipment can support various modules, depending on what parameters need to be recorded. Live alerts will be sent via mobile phone to a rapid response team based in the community.

The Yealm Estuary to Moor catchment group in South Devon has successfully raised funds, through their inter-parish water quality group, to install and manage an Aqua TROLL 600 in the River Yealm.



Evidence - citizen science



Westcountry Rivers Trust CSI

Local river health campaign groups in South Hams have engaged catchment communities in their campaigns for water quality by encouraging their involvement in citizen science investigation (CSI) observations.

- Yealm Estuary to Moor
- Wild About the Erme River
- Avon River Champions
- Sustainable Blackawton
- Friends of Salcombe Kingsbridge Estuary
- Friends of the Dart

CSI engages all age groups and encourages 'ownership' of their local water body, making catchment communities more likely to collaborate to develop a catchment plan to restore river health. CSI can provide longer term general observations of trends in biodiversity that is a good indicator of river health.

The WRT have suggested monitoring stations along water bodies, based on the safety and access to the monitoring point and its position in relation to points where tributaries join the main river. https://wrt.org.uk/project/csi-resources/

A coordinated CSI programme makes a positive contribution by creating awareness of :

- Relative importance of agriculture and SWW as sources of pollution.
- Householders' responsibilities not to flush tampons, condoms, wet wipes and cigarette butts down the toilet or use the drains as a free rubbish disposal system.
- Sources and effect of pollution on aquatic biodiversity (fish, aquatic insects and aquatic flora) and the birds and mammals that rely on them as part of the food web.
- Effect of water temperature, pH and turbidity on aquatic life

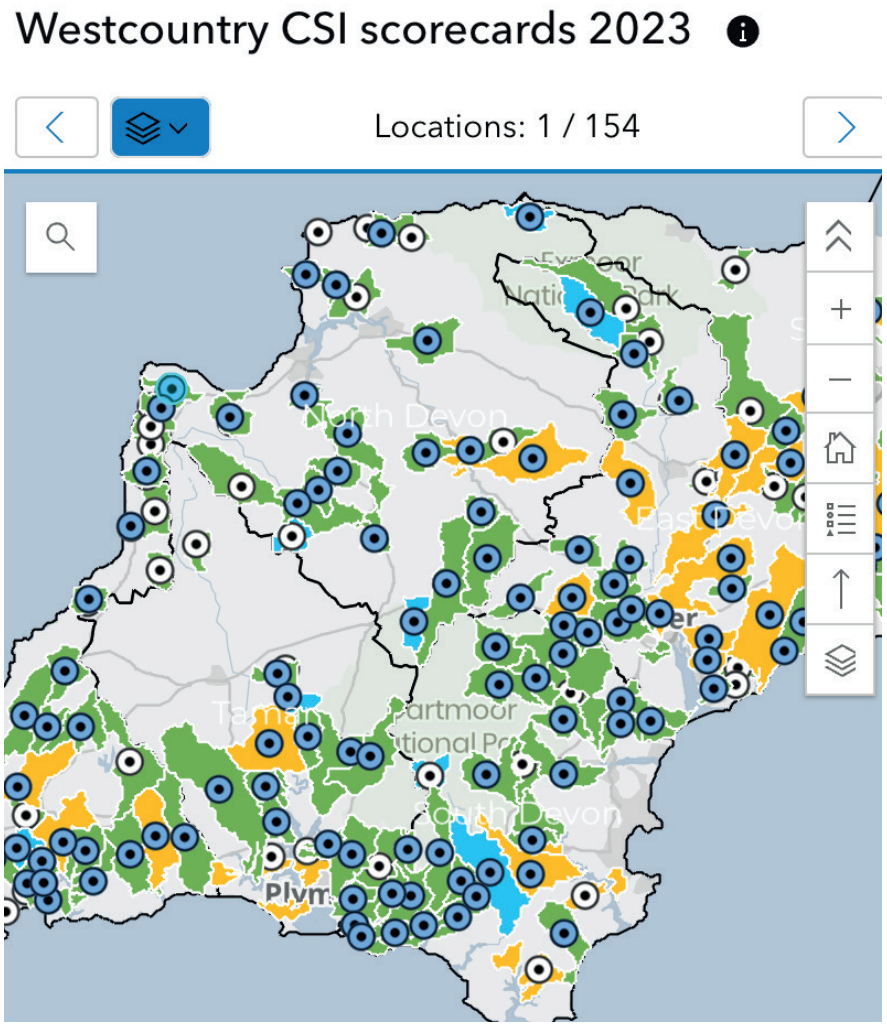
River Guardians

It is helpful to have a local person who is a good communicator and possibly a trainer too, to act as a coordinator for citizen scientists in their locality. We call them River Guardians.

Westcountry Rivers Trust CSI Score Cards

If there are at least 12 (monthly) CSI records in a river/tributary, WRT will analyse the observations and produce a score card (left)

Explore map online and click on dots to view score cards for rivers near you.



CSI Kick sampling

Aquatic insects in our rivers are an indication of the health of a river. They can be sampled by collecting water samples after kicking up the riverbed to disturb aquatic insects living and feeding there.

The Riverfly Partnership is a network of organisations, representing anglers, conservationists, entomologists, scientists, water course managers and relevant authorities, working together to: protect the water quality of our rivers.

Sampling kits, training and signing up to monitor riverflies or set up a river group can be found on their website.

CSI training in Kick-sampling can be arranged on request

Campaigns

DEVON RIVERS MANIFESTO
Restoring river health by working together.

Devon Rivers Manifesto

The Devon River Manifesto was launched at the **Devon County Show** in May 2024. Visitors to the **River Discovery Zone** marquee voted on a list of demands for prospective MPs to include in their manifestos.

Rivers flow across political boundaries. The Devon Rivers Manifesto provides an opportunity for our elected MPs to collaborate in a cross-party initiative to restore the health of our rivers in Devon by 2027.

Politicians are the only group with the power to dictate the mandate and allocate the budgets needed to restore the health of our rivers.

Due to public outrage, 'river health' featured in all political manifestos at the General Election.

A catchment-based approach through 'River Constituencies' is essential. We implore our MPs to put down the cudgels and pick up the batons to work together in Devon. With their support we can focus on the sources of pollution in our River Constituencies and develop a **Blue Print Project** for many small local catchment plans to solve the problem across Devon.

Water (Special Measures) Bill

Parliament will soon be debating the new Water (Special Measures) Bill

Under the proposed laws, regulators will be able to issue severe and automatic fines without having to direct resources to lengthy investigations, the Government said.

Currently, the regulators cannot impose fixed financial penalties for most offences and the current maximum fine is just £300, meaning it is not cost effective for them to penalise frequent, more minor offences.

The '**burden of proof'** needed by the EA to begin an investigation, into non-compliance with Discharge Permits, is currently too high and the are fines too low to warrant thorough supervision of compliance. Our Government has proposed 'unlimited fines' and lowering of the burden of proof needed. Our MPs will debate this Bill and decide if this is what is needed.

Find out how your MP voted any motion in Parliament - including the Water (Special Measures) Bill

@blueprintproject

Every little catchment matters.

Catchment communities have the relationships and local knowledge to develop many small catchment plans that could prevent the continued pollution of nearby water bodies by their own farmers, homes and businesses.

A myriad of small, locally relevant, actions make it economically feasible to solve a region-wide problem by 2027. A Blueprint for local action is offered.

By acting urgently to curtail pollution in our catchment neighbourhoods, our rivers could reach Good Ecological status by 2027. This is the target date set by the Water Framework Directive.