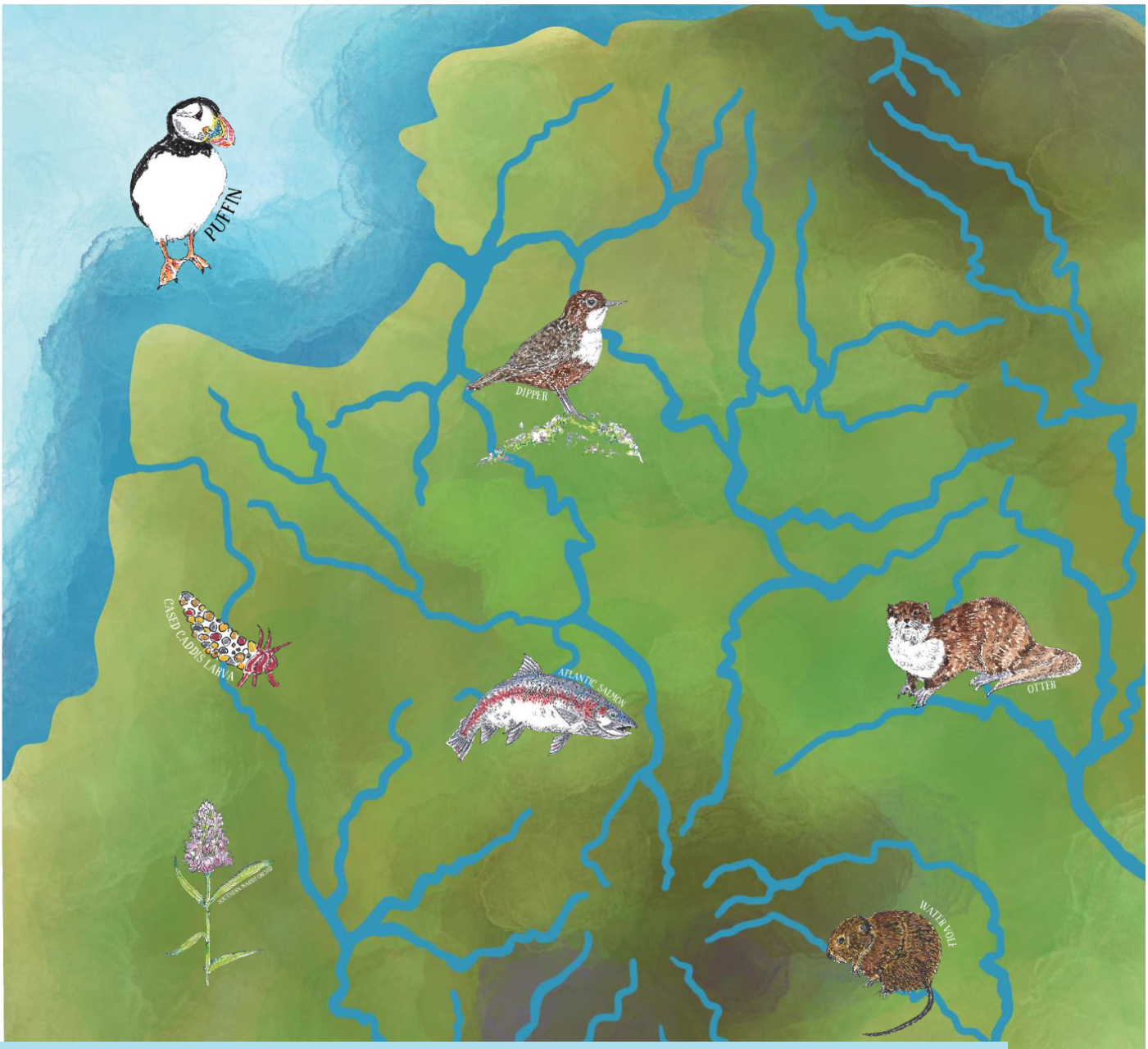


State of River Constituencies

South Hams (2024)

Working together to improve river health



State of River Constituencies in Devon

Avon River Champions has published a series of regional reports summarising water quality data and identifying pollution sources affecting aquatic life and water users in Devon.

Rivers, tributaries, lakes, and estuaries often cross political boundaries. "River Constituencies" are proposed as regions that span these boundaries, encouraging cross-party collaboration between MPs representing the people living in these areas.

These reports compile publicly available data from the Environment Agency to help MPs foster local discussions on practical solutions to river pollution in Devon.

A guide outlines the regulatory system's roles and failures, calling on MPs to address these issues when debating the Water (Special Measures) Bill.

The reports also offer sources of evidence and opportunities for collaboration at the catchment level.

The 'River Constituencies' series covers:

- Torridge & Tavistock and North Devon
  Geoffr y Cox MP & Ian Roome MP
- South Hams
  Rebecca Smith MP & Caroline Voaden MP
- SW Devon, Plymouth Moorview & Plymouth Sutton & Devonport
  Rebecca Smith MP, Fred Thomas MP
  Luke Pollard MP
- South Devon, Central Devon and Torbay
  Caroline Voaden MP,
  Mel Stride MP, Steve Darling MP
- Tiverton & Minehead, Exeter, Exmouth & Exeter East, Honiton & Sidmouth
  Rachel Gilmour MP, Steve Race MP,
  David Reed MP, Richard Foord MP
- Newton Abbot
  Martin Wrigley MP.

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.



The State of River Constituencies in Devon South Hams

South Devon and South West Devon

Rebecca Smith MP and Caroline Voaden MP

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Executive Summary

How bad is river and estuary pollution in the River Constituencies of South Hams?

River Constituencies.

The parliamentary constituencies of **Rebecca Smith MP** and **Caroline Voaden MP** span several river catchments. 'River Constituencies' are proposed as regions that would span political boundaries, encouraging cross-party collaboration between MPs representing the people living in these areas. River Constituencies encompass many non-partisan parish councils with intimate local knowledge and relationships with relevant stakeholders. Together with district councils, these parties are capable of initiating and coordinating many small catchment plans to design and deliver pollution prevention actions across our whole river system from Dartmoor to the Bristol and English Channels. 'The State of River Constituencies' series presents detailed pollution data for each small catchment from the Environment Agency's Catchment Explorer.

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. Rivers are divided into smaller sections (**water bodies**), each of which have their own Ecological classifications. 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. A **catchment based approach** to improving river health is essential because what happens upstream can affect the ecological status downstream. The status could be Excellent, Good, Moderate, Poor or Bad. The next classification update is due in 2025.
This review has collated the detailed local information needed for our MPs, catchment community groups, local government and environmental organisations to collaborate to meet the legally binding 2027 target.

59 % of our water bodies are NOT of Good Ecological status.
41 % of our water bodies ARE Good Ecological status
8 % are of Poor/Bad Ecological status

	Poor	Moderate	Good	Excellent
Dart, Start Bay & Torbay (26 water bodies) Tor Bay Water Body Dart Estuary Water Body	3	13	12	0
Avon, Salcombe & Kingsbridge River basin (7 water bodies) Avon Estuary Salcombe Harbour Kingsbridge Estuary	0	6	4	0
River Erme (5 water bodies) Erme Estuary Water Body	1	4	1	
River Yealm (5 water bodies) Yealm Estuary		2	3	
Total (%)	4 (8%)	25 (51%)	20 (41%)	0 (0%)

Table above: The total numbers of individual water bodies in each Operational Catchment classified as Poor, Moderate, Good or Excellent Ecological status (2023) Ref EA Catchment Explorer.

Reasons for Not Achieving Good (ecological status) RNAG

The EA Catchment Explorer reports on the ecological status of all water bodies. It indicates the **Sectors responsible** for the failure to achieve good ecological status and the activities of that Sector which have led to this. The table below excludes pollution and RNAG from urban and transport sources. Full details on all sources of pollution can be found in the tables and links provided in this review.

59% of the RNAG is attributed to AGRICULTURE
41% 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	22	12
Avon, Salcombe & Kingsbridge River basin (7 water bodies) Avon Estuary Salcombe Harbour Kingsbridge Estuary	11	8
River Erme (5 water bodies) Erme Estuary Water Body	8	5
River Yealm (5 water bodies) Yealm Estuary	1	4
Total RNAG and (%) of Agric +SWW	42 (59%)	29 (41%)

Table above: Sectors responsible for RNAG in water bodies within the Torridge & Tavistock and North Devon Management Catchments. Ref EA Catchment Explorer.

Catchment Sensitive Farming

Catchment Sensitive Farming is a government funded project involving Natural England, the Environment Agency and Defra aims to reduce diffuse water pollution from agriculture. No targets or time-lines have been published. The overall target of 2027 for all rivers to be of good ecological status remains a national target with the proviso that forever chemicals might remain in the water until 2063.

Whilst the majority of RNAG are attributed to agriculture in the Torridge & Tavistock and North Devon political constituencies, there is no publicly available data on the interventions being made on a local scale to address the agricultural RNAG reported by the Environment Agency. All interactions with farmers are confidential.

E-DNA analysis and Inter-parish water quality groups.

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.

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)

The sewage and drainage water pipework systems often join together into one system combining sewage from our toilets with drainage water from roofs and roads into SWW treatment works. The combined waste is treated by SWW before the treated effluent is discharged into our rivers.

Discharge Permits, issued by EA to SWW, permit untreated effluent to be discharged (CSO) to occur under specific circumstances because if the large volume of combined effluent did not end up in our river, it would be forced back up the pipework and into our bathrooms. However, a CSO is illegal if it happens outside exceptional weather conditions. The EA is conducting several legal cases against SWW for discharging when there were no exceptional weather conditions. This is a **Dry Weather Spill.** Climate change and new housing developments without **Sustainable Drainage Solutions** are magnifying this problem.

Rebecca Smith MP

River Constituency includes river catchments for **Plym, Tavy, Yealm and Erme**

Total of 2,430 spills Total duration of 21,285 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

Ref: Investigate menu (Constituencies) Rivers Trust Sewage Map 2024

Hydraulic capacity and on-going investigations

Sewage spills into our water bodies can occur when the SWW treatment works are not big enough and lack '**hydraulic capacity**' to treat the combined volumes. The data about hours of CSO spills is presented in the **Rivers Trust Sewage Map**. This data is provided by the Environment Agency from **Event Duration Monitors** obtained from all water companies. The reasons for any high CSO counts is identified by the EA as either (inadequate) '**hydraulic capacity**' or no reason is yet determined because there is an '**on-going investigation**'. The main reasons identified by an 'on-going investigation' could be that the treatment works lack 'hydraulic capacity' or there is **infiltration of ground water** into the pipework system because SWW needs invest in maintenance, upgrading or replacement. There are concerns about the length of time taken to complete investigations and the lack of transparency about on-going investigations (2023) generally.

Asset Management Plans (AMP) , Ofwat and Price Reviews (PR)

Capital investments by SWW in improving the water distribution, storage and treatment of water is **constrained by Ofwat** because they safeguard customers' bills which would fund these investments. Ofwat must prevent profiteering by monopoly water companies without compromising their ability to raise funding from customers and shareholders to provide the services needed. The current serious nature of river pollution indicates that this system is flawed.

Water companies must submit **5 year Asset Management Plan**s to Ofwat detailing the investments they propose are needed to provide the services required. The next AMP period is AMP8 (2025 to 2030). **Price Reviews** (the amount water companies can charge customers) align with the AMP period and have to be agreed with Ofwat. Water companies have submitted their proposed PR25 and Ofwat have responded with their **Draft Determination of PR25.**This is now open for public consultation. It is forecast that this will lead to average increase in customer bills (agreed by Ofwat) of £19 per year between 2025 and 2030. That amounts to £94 over the period, a rise of 21%. The water industry wants bills to rise by an average of 33% by 2030, and has warned the increase proposed by Ofwat will not be enough to tackle problems including sewage leaks.

This review is provided to enable our MPs 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 South Hams.

Because every little catchment matters

We are a catchment community group that aims to restore the ecological; health of the River Avon in South Devon. We work closely with other local catchment community groups - Friends of Salcombe Kingsbridge Estuary and Sustainable Blackawton who campaign for water quality in the River Gara & Slapton Ley and the Salcombe & Kingsbridge Estuary.

W are campaigning at local and national government level to promote understanding of the key failures of the regulatory system and create awareness of the local sources of pollution within River Constituencies.

We have embarked on a regional political campaign using the **Devon River Manifesto** as a platform to encourage cross-party collaboration on the reform of our regulatory system.

We are sharing our own **Blue Print** for communities to make a local catchment plan for the restoration of good ecological status of all rivers in Devon by 2027.

Louise Wainwright
Avon River Champions
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www.avon-river-champions.org
@avon-river-champions.org

Readers from South Hams are encouraged to contact their own community groups operating in the various catchments of South Hams.

The South Hams is endowed with strong local catchment community groups already implementing the programmes outlined in this publication.

These groups have already shared much good practice between our catchments in South Hams and are collectively providing catchment groups in other parts of Devon with exemplary programmes worth following.

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

For more information see the Avon River Champions website.

The State of River Constituencies Call to Action

South Hams

The parliamentary constituencies of **South Devon** and **South West Devon** (South Hams) overlap with several Environment Agency (EA) Operational Catchments.

RIVERS

- Dart Start Bay and Torbay
- Avon Salcombe and Kingsbridge
- Erme
- Yealm

ESTUARIES

- Avon Estuary
- Salcombe Harbour and Kingsbridge Estuary
- Yealm Estuary
- Dart Estuary
- Erme Estuary

Our MPs, local government community organisations are invited to consider:

1. Familiarising themselves with the information collated in this review on the ecological status of the many water bodies within these Catchment Constituencies and the RNAG in each water body.

2. Creating i**nter-parish water quality** groups to:

   - Co-fund and undertake **eDNA water analysis** by Applied Genomics to determine the relative scale of pollution from agriculture or SWW in their water bodies in order to prioritise any interventions needed locally.
   - Bring together local stakeholders to create local catchment plans to resolve the agricultural RNAG with local farmers, organise volunteer support and raise funding to implement solutions.
   - Engage with SWW to prioritise capital investment in improved hydraulic capacity where eDNA data confirms the scale of pollution from SWW treatment works.
   - Recruit and train citizen scientists through the Westcountry Rivers Trust and create a **River Guardian** role for each parish, equivalent to parish tree wardens, to support citizen scientists and collate local data.

3. Urgently identifying the root causes for the inadequate regulatory interventions by the **Environment Agency** and **Ofwat** which have failed to prioritise the ecological status to our water bodies.

Whilst EA monitoring data continues to accumulate and identify the Reasons for Not Achieving Good ecological status, there is disappointingly little evidence that the data is influencing Government priorities and budgets or investments by SWW.

We urgently need to develop an enabling environment to **restore river health by 2027.** The lack of transparency, accountability and progress is compromising public faith in the 'regulatory process' and the implementation of existing laws.

Louise Wainwright
Chair Avon River Champions
www.avon-river-champions.org



We want rivers in Devon to be of GOOD Ecological status by 2027.

OTHER Cause of RNAG 'Forever Chemicals' now banned but may take until 2063 to dissipate e.g. Polybrominated diphenyl ethers (PBDE) & mercury compounds.

Table 1: DART, START BAY & TORBAY

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

Water bodies	Eco status	Agriculture (22)	SWW (12)	Other Sectors (2)
Am Brook	MODERATE	poor nutrient management	sewage discharge (continuous)	
		poor livestock management		
		poor soil management		
Ashburn	GOOD			
Avon (Devon Tidal) Sth Hams - Blackpool	GOOD			
Avon (Devon Tidal) Sth Hams - Slapton	POOR	poor nutrient management	sewage discharge (continuous)	
		poor livestock management		
		poor soil management		
Bidwell Brook	MODERATE	poor nutrient management	sewage discharge (continuous)	
		poor livestock management		
		poor soil management		
Blackbrook River	MODERATE			
Cherry Brook	MODERATE			
Dart	MODERATE		Surface water abstraction	
Dart (Tidal)	MODERATE	poor livestock management	sewage discharge (continuous)	
Dean Burn	GOOD			
East Dart River	GOOD			
East Webburn River	POOR			
Harbourne River	GOOD			
Hems - Lower	MODERATE	poor nutrient management	sewage discharge (continuous)	
		poor livestock management		
		poor soil management		
Hems - Upper	GOOD			
Mardle	GOOD			
Slapton Ley	MODERATE	poor livestock management (2)	sewage discharge (continuous) (2)	septic tanks (2)
			sewage discharge (intermittent) (2)	
Swincombe	POOR		Surface water abstraction	

Table 1: DART, START BAY & TORBAY (cont.)

Water bodies	Eco status	Agriculture (22)	SWW (12)	Other Sectors
The Gara	MODERATE	poor nutrient management	sewage discharge (continuous)	
		poor livestock management		
		poor soil management		
Venford Reservoir	MODERATE	poor livestock management		
Wash	GOOD			
Webburn	GOOD			
West Dart River (Blackbrook to Swincombe)	GOOD			
West Dart River (Lower)	GOOD			
West Dart River (Upper)	MODERATE		water abstraction	natural conditions
West Webburn River	MODERATE			

ESTUARIES				
Dart Estuary Water Body	MODERATE	poor nutrient management	sewage discharge (continuous)	
		poor livestock management		
		poor soil management		
Tor Bay Water Body (Torbay coastal waters)	GOOD			

Table 2: 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

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 3: ERME
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

Water bodies	Eco status	Agriculture (8)	SWW (5)	Other Sectors
Ayleston Brook	MODERATE	Riparian/in-river activities (inc bankside erosion)	sewage discharge (continuous)	
			sewage discharge (intermittent)	
Erme	POOR			Natural Barriers ecological discontinuity
Lower Erme	MODERATE	Farm/site infrastructure (2)	Sewage discharge (continuous) (2)	
		Riparian/in-river activities (inc bankside erosion) (2)		
Lud Brook	MODERATE	poor nutrient management	sewage discharge (continuous)	
		poor livestock management		
		poor soil management		
Sheepham Bk	GOOD			

ESTUARIES				
Erme Estuary Water Body	MODERATE			

Table 4: YEALM
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

Water body	Ecological status	Agriculture (1)	SWW (4)	Other Sectors
Lower River Yealm	GOOD			
Newton Stream	MODERATE		Sewage discharge (continuous) (3)	
Piall	MODERATE	Poor nutrient management	Sewage discharge (continuous)	
Silverbridge Lake	GOOD			
Upper River Yealm	MODERATE		Surface water abstraction	NATURAL Barriers - ecological discontinuity; NATURAL mineralisation

ESTUARIES				
Yealm Estuary	GOOD			

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

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 seven EA 'Operational Catchments' of relevance to this review.

- Dart Start Bay and Torbay
- Avon Salcombe and Kingsbridge
- Erme
- Yealm

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.
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' effluen** 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.

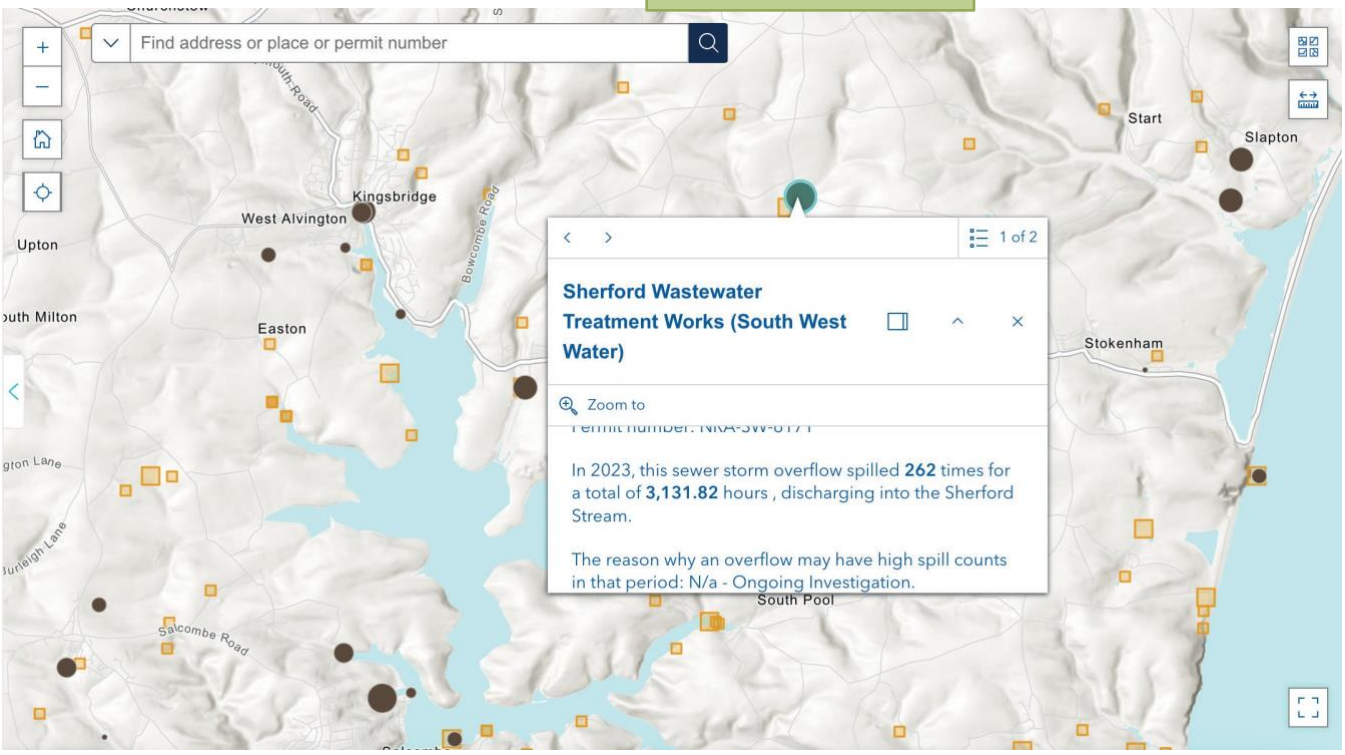
The Discharge Permit defines the **number of households** that each sewage treatment plant is designed to serve. The EA has failed to monitor and update the Discharge Permits even when the EA's own water quality data (RNAG) is given as inadequate **'hydraulic capacity'**(to serve the homes connected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

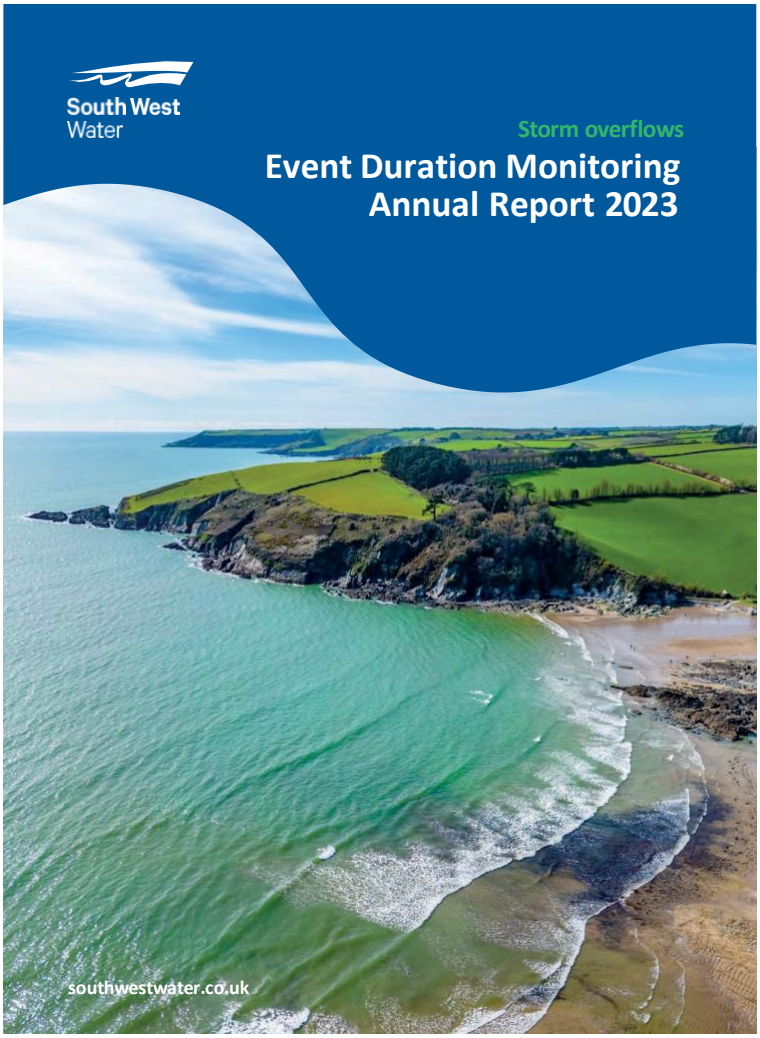


Evidence
Event Duration Monitoring

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.

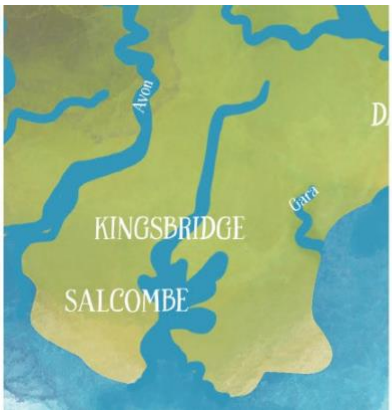
Annual CSO in local Constituencies (2023)



Rebecca Smith
Catchment Constituencies: Rivers Plym, Tavy, Yealm and Erme.

SOUTH WEST DEVON
CONSERVATIVE

Total of
2,430 spills
Total duration of
21,285 hours



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

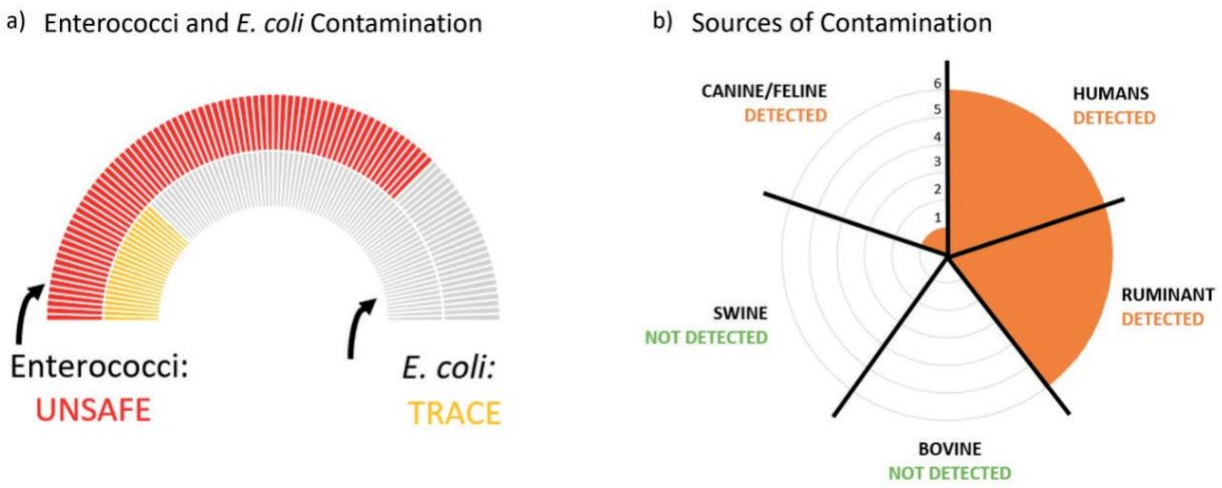
The EA Catchment Explorer data determines the "Reasons for Not Achieving Good" ecological status in our water bodies. A RNAG will state whether Agriculture or SWW is a source of this pollution but it does not quantify the relative importance of these sources, making it less obvious where interventions 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.

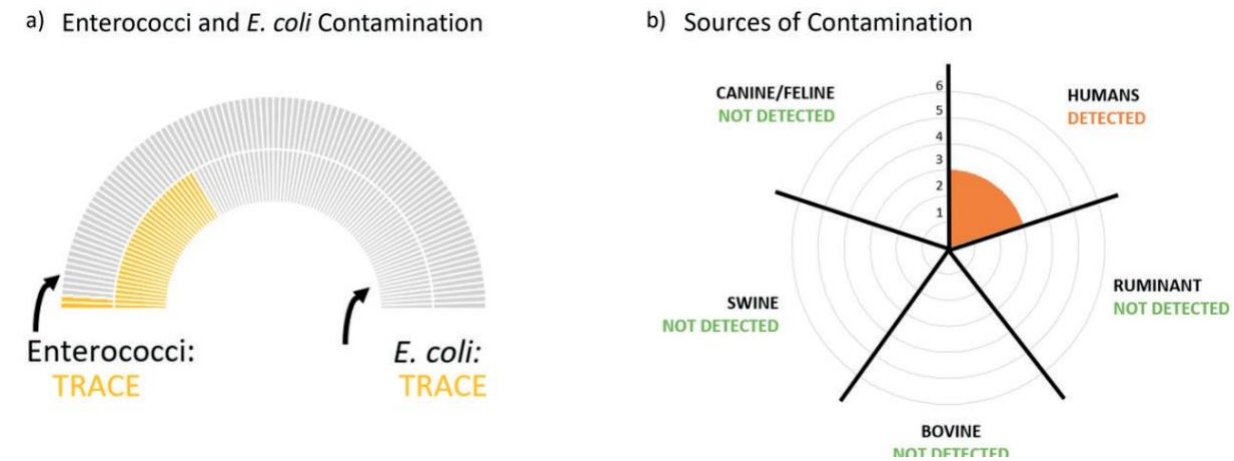
Faecal matter (poo) that enters the river can be from a wide range of animals or from humans. Bacteria present in the faecal matter has a different DNA fingerprint depending on which animal it came from. Therefore analysis of bacteria can determine the extent and source of the pollution. Faecal matter 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**



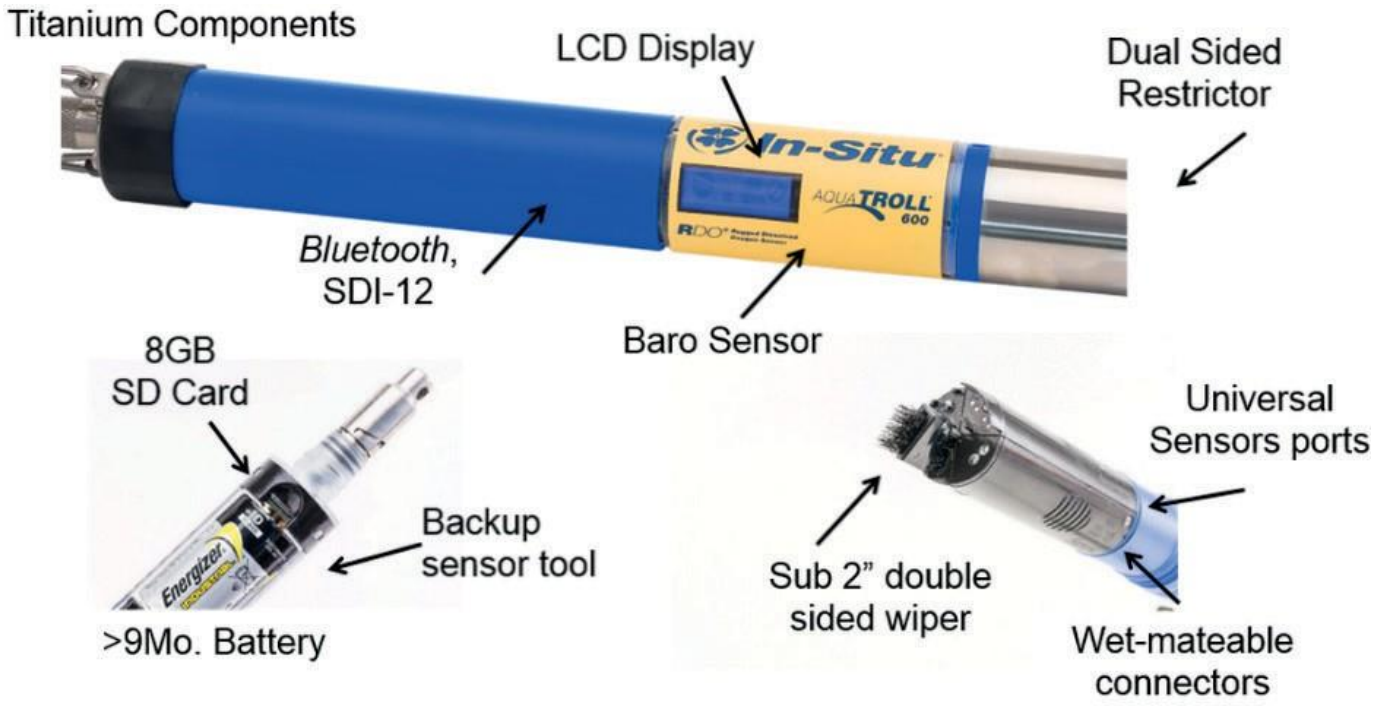


Evidence - Continuous Water Monitoring



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 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

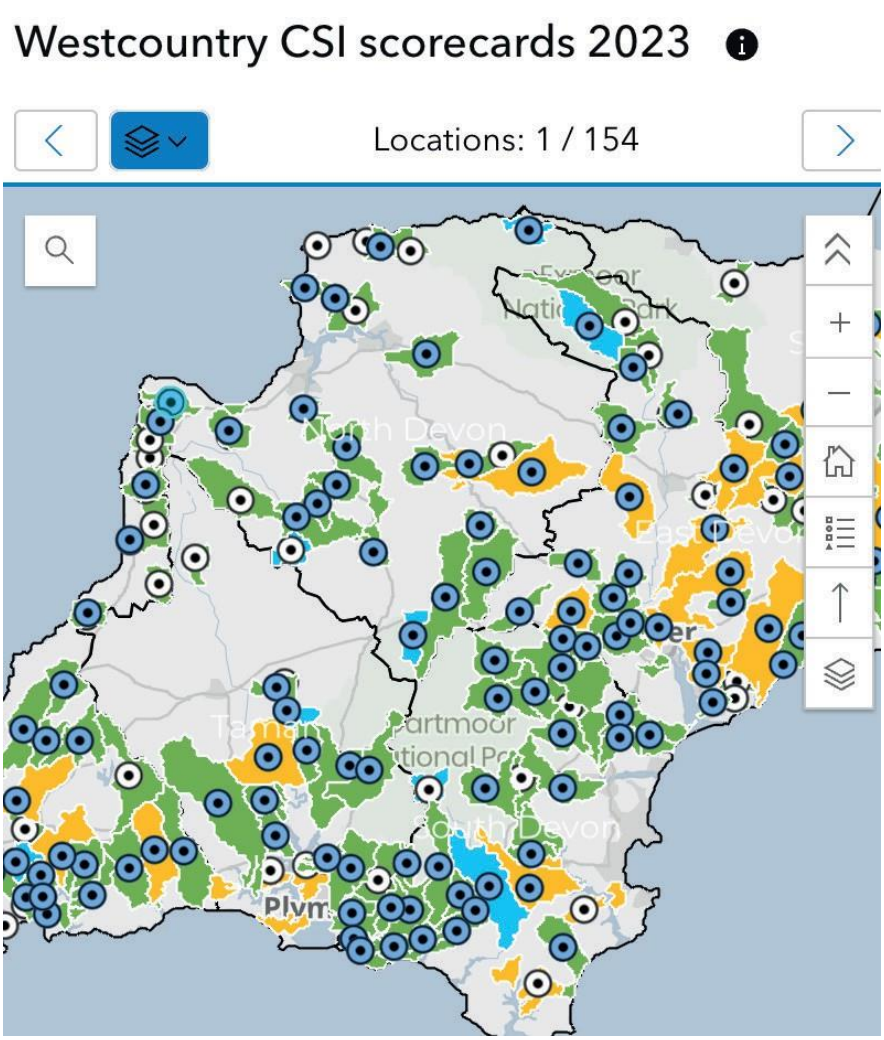
River Guardians

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.





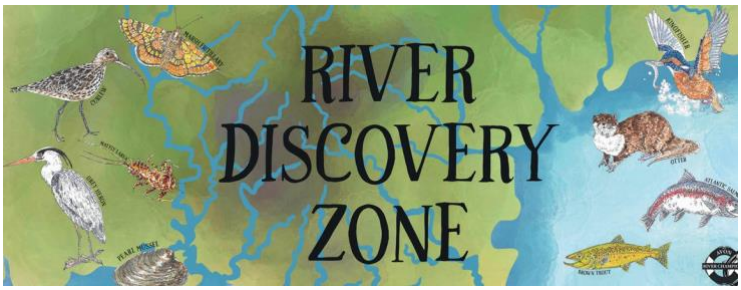
Collaboration

Avon River Champions promotes collaboration between catchment community groups in order to share information and resources, and to amplify our concerns with the Regulator (EA), local and national government and South West Water. We are facilitating this by:

- Collaborating with **Friends of the Salcombe Kingsbridge Estuary** and **Sustainable Blackawton** in the design of the BLUEPrint - aiming to design three catchment plans for river health restoration.
- Sharing information through the series of publications on **State Of River Constituencies in Devon**
- Publication on our website of the **North Devon Directory** and **South Devon Directory** of other community groups working to restore river health
- Bi-annual **River Discovery Zone** marquee at Devon County Show where catchment community groups can exhibit to recruit and inform the public of the issues and achievements in the rivers in Devon.
- Offer a **speaker at events** for newly emerging groups in Devon, to signpost issues and share the template of BLUEPrint as a possible route to improving the health of water bodies in other catchments.
- Loan r**iver exhibition materials** for other catchment groups in Devon.

Own the problem, find the solution.

The next River Discovery Zone will be in 2026. Contact Avon River Champions if you want to exhibit in our marquee







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.

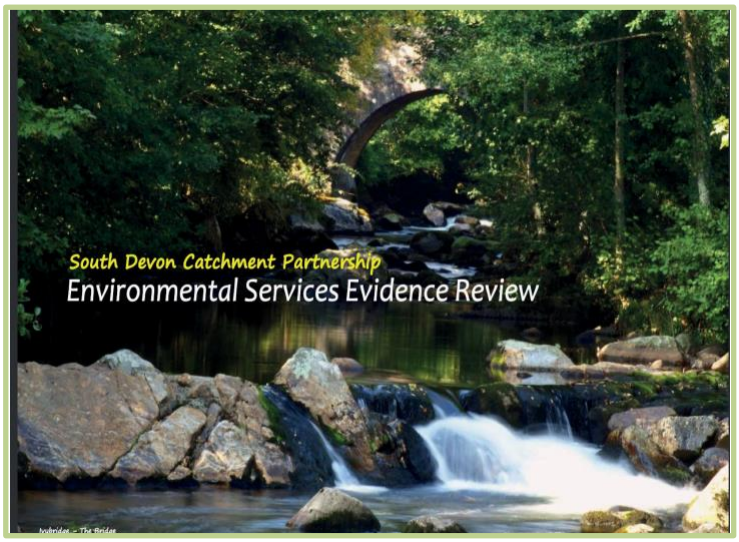
Closer attention to Sustainable Drainage Plans for all planning applications connected to water bodies where the RNAG is due to SWW sewage treatment works having insufficient hydraulic capacity - will ensure drainage plans do not add to pollution.

Collaboration

Environmental Organisations

The **Catchment Based Approach** (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 includes organisations such as the Environment Agency, Westcountry Rivers Trust, Devon Wildlife Trust, fisheries associations and landowners.



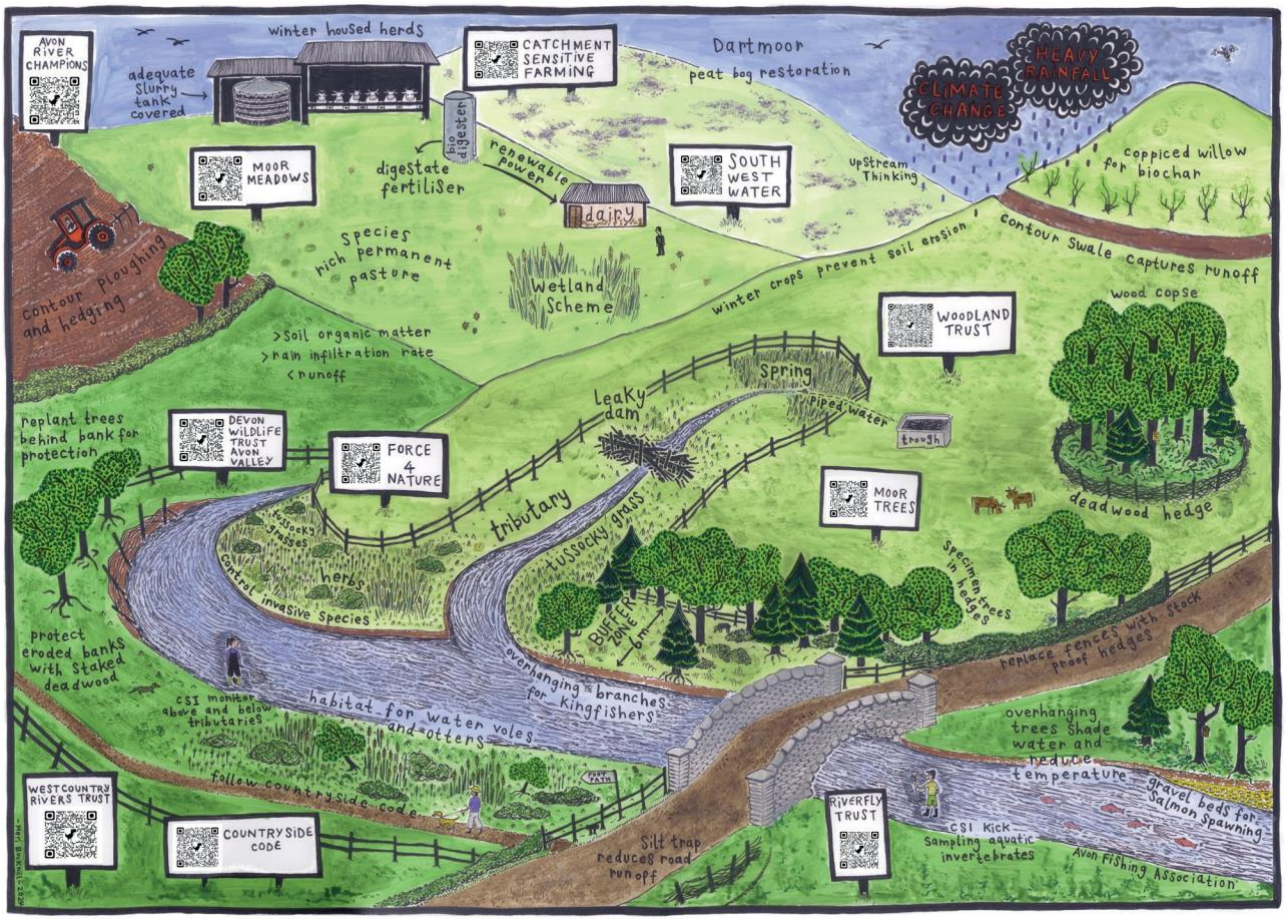
The Catchment Based Approach Partnership (CaBA) has a catchment plan. Over the years they have drawn down funds to address diffuse pollution, point source pollution, protected species like the freshwater pearl mussel, protection of otters, reintroduction of beavers, riparian tree planting, weir removal etc.

CaBA's innovative 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 Projects are complimentary.



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.



Collaboration LOCAL CATCHMENT PLANS

Engagement of all sectors in a very local **Catchment Summit** would provide an opportunity to review the local evidence and collaborate to improve water quality. Below are some suggestions for discussion, but there are many more topics…. What are the other options? What are the priorities? What is affordable? What further evidence is needed? How can this be led and coordinated?

South West Water

- Develop better relationships with small catchment community groups, meet to discuss problems and develop a collaborative approach to problem solving.
- Ensures only treated final effluent enters our rivers, except in extreme weather conditions.
- Collaborates 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.
- Puts easily accessible information into the public domain about the number of households which their waste water and sewage treatment works have the hydraulic capacity to serve without any dry spill events.
- Makes Dry Spill Events monitoring with flow rates (as well as hours of spills) easily available in the public domain.
- Develops an effective communication system with local government Development Management Committees to ensure that the risk of increased pollution from the proposed development is recognised and taken into account in the planning process.
- Ensures local government and catchment community groups have easy access to evidence of the extent of pollution arising from their assets and are aware of the timeline and amount of investment needed to provide sufficient hydraulic capacity to prevent pollution.
- Provide households with rainwater catchment tanks to prevent storm water from roofs swelling the volume of water that creates more CSOs.

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 or form a local **river community group**
- Volunteer to help install local nature based solutions
- Invest in **Sustainable Drainage Solutions** which prevent rainwater from roofs and drains from increasing the volume of water entering combined sewer drain systems
- Ensure sinks and drains are not used for rubbish disposal.
- Only flush **poo, pee and paper** down the loo, ensure wet wipes and cigarette butts go in the bin
- Use **phosphate-free** detergents, shampoos and other beauty products.
- Ensure paints, solvents and other forever chemicals do not enter the drain.

Local Government

- Ensure SWW is consulted for all planning applications whether or not they are a designated 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.**
- Form I**nter-parish water quality groups** to support local river community group projects
- Ban **wet wipes** in Devon.

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.

AVON RIVER CHAMPIONS

@avonriverchampions

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