MONITORING OF THE PAR RIVER AND ITS TRIBUTARIES

The monitoring group operates under the citizen science scheme run by the Westcountry Rivers Trust. Comments, opinions and errors in this report are those of the author(s) only.

OCTOBER 2025

CONTENT	PAGES

A. OUR OCTOBER 2025 FINDINGS AT A GLANCE (SEE SECTIONS C TO I FOR FULL PICTURE)

1. Data

We sampled at 15 locations between 14th and 19th October 2025. The **red** highlighting shows results of concern. Unfortunately, it was impossible to monitor the Treskilling Stream.

CRITERIA	UPPER PAR (UPSTREAM OF CONFLUENCE WITH BOKIDDICK STREAM NEAR BLACK HILL CAR PARK) 5 TESTING LOCATIONS	LOWER PAR (FROM CONFLUENCE WITH BOKIDDICK STREAM TO SEA) 3 TESTING LOCATIONS	TRIBUTARIES OF UPPER PAR (EXCLUDING TRESKILLING STREAM THIS MONTH) 5 TESTING LOCATIONS	TRIBUTARIES OF LOWER PAR (POLMEAR & TYWARDREATH STREAMS) 2 TESTING LOCATIONS
TEMPERATURE ˚ CELSIUS (SHOULD NOT EXCEED 18˚ CELSIUS)	Mean 12.76 Median 12.8 Min 12 Max 13.2	Mean 14.53 Median 14 Min 13.6 Max 16	Mean 13.4 Median 13.5 Min 12.7 Max 14	Mean 14.85 Median 14.85 Min 13.5 Max 16.2
TOTAL DISSOLVED SOLIDS PPM (SHOULD NOT EXCEED 300 PPM)	Mean 115.8 Median 73 Min 57 Max 189	Mean 144 Median 157 Min 111 Max 164	Mean 105.2 Median 80 Min 67 Max 203	Mean 148 Median 148 Min 111 Max 185
TURBIDITY (SHOULD BE <12 ON SECCHI TUBE. FOR AVERAGING ANY READING <12 IS COUNTED AS 0)	Mean 0 Median 0 Min 0 Max 0	Mean 0 Median 0 Min 0 Max 0	Mean 6.6 Median 0 Min 0 Max 20	Mean 0 Median 0 Min 0 Max 0
PHOSPHATES PPB (SHOULD NOT EXCEED 100 PPB)	Mean **200** Median 0 Min 0 Max **500**	Mean **1000** Median **1000** Min **1000** Max **1000**	Mean 0 Median 0 Min 0 Max 0	Mean 0 Median 0 Min 0 Max 0
NITRATES (SHOULD NOT EXCEED 50 PPM)	Mean 0 Median 0 Min 0 Max 0	Mean 0 Median 0 Min 0 Max 0	Mean 0 Median 0 Min 0 Max 0	Mean 0 Median 0 Min 0 Max 0
RIVERFLY SCORE (TRIGGER LEVEL AT LRM SHOULD BE ≥ 6)	Lower Par (Lady Rashleigh Mine). Score = 8. Trigger level = 6.			
KEY WILDLIFE (WRT KEY SPECIES ONLY* – FOR FULL LIST SEE SECTION I)		Riverfly nymphs. Dipper. Otter spraint.	Beaver lake.	
INVASIVE PLANTS	Himalayan Balsam, Japanese Knotweed		Himalayan Balsam, Japanese Knotweed	

***The WRT monitoring forms highlight: Water Vole; Heron; Dipper; Otter (live sighting); Kingfisher; Dragonflies/Damselflies; Mink; Grey Wagtail; Fish; 'Other' . Beavers aren't stipulated but could, for example, be considered a key species under 'Other'. It is in this latter category that indirect evidence of otters, such as spraint, is included.**

2. Key points

(a) Update from September 2025.

In the September report mention was made of small booms placed in the Tywardreath Stream near Par railway station. The Environment Agency has explained that there had been a leak of oil from the railway and that they had worked with Network Rail to limit the pollution with booms. Network Rail continues to monitor the situation.

(b) Positive signs

(i) The riverfly survey at Lady Rashleigh Mine in Luxulyan Valley resulted in a score of 8, exceeding the trigger level of 6.

(ii) Otter spraint was found in Luxulyan Valley and a dipper was seen, both good signs.

(iii) Although a proper record was not kept, there were few, if any, sewage spills.

(c) Points of concern

(i) Yet again, very high phosphate levels were noted in the main Par River. Phosphates were present on the lower section of the Upper Par and on the Lower Par.

(ii) The Molinnis Stream, though clear, had a Total Dissolved Solids score of 203 PPM, which, while below the figure of 300 PPM which is taken to be the upper safe level, is still a concern.

(iii) A smell, thought to be derived from sewage, was evident once again at Cam Bridges on the Upper Par. Another location which often has a similar smell is the Molinnis Stream. Possibly this is linked with the Combined Sewer Overflow.

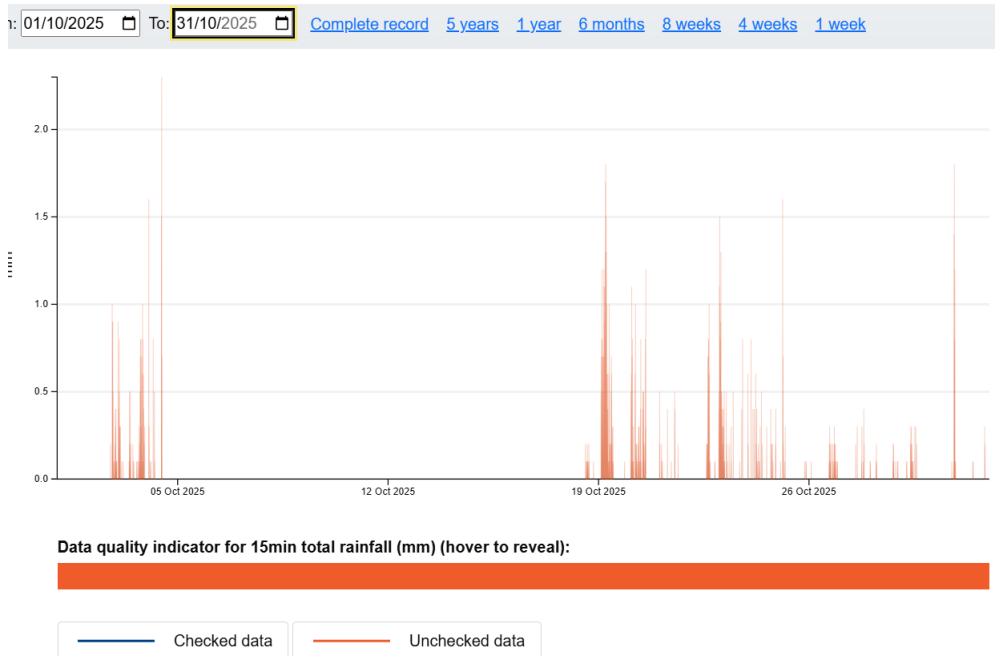
(d) Areas for further research

It is interesting that Total Dissolved Solids levels vary so much. On the upper reaches of the main Par River levels are consistently below 100 PPM, as they are at all 3 monitoring locations on the Bokiddick Stream; yet they are always higher on the Carbis and Molinnis Streams (china clay area) and the Polmear and Tywardreath Streams (agricultural area). It is reasonable to assume that the china clay and agricultural sectors are contributory factors but this needs to be confirmed.

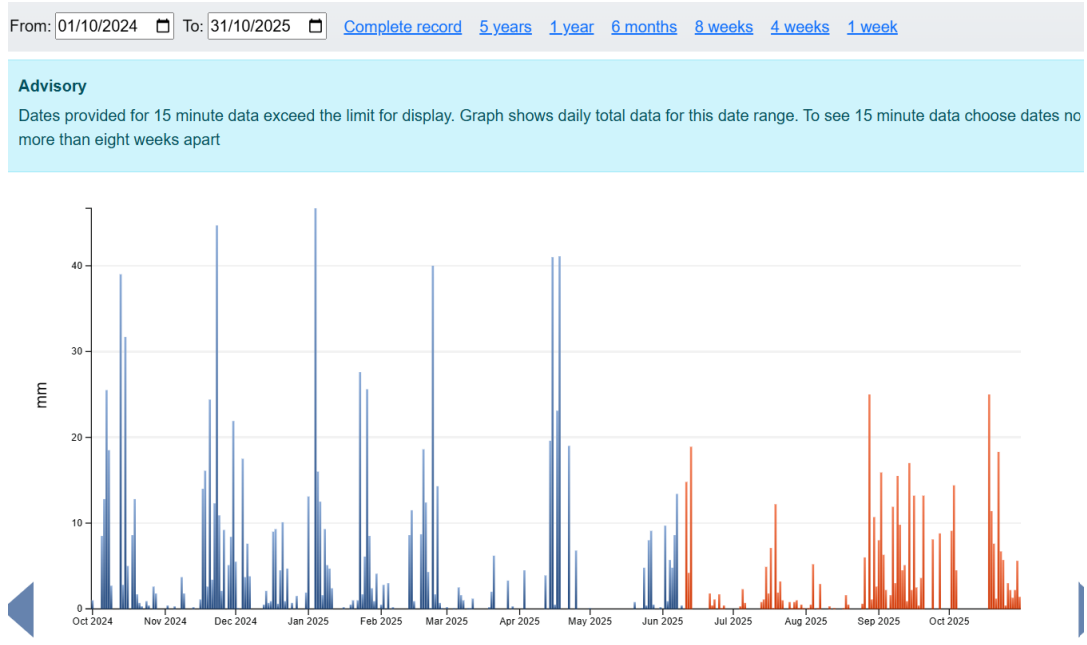
B. RAINFALL, RIVER LEVELS AND FLOW

1. Rainfall at Luxulyan (https://environment.data.gov.uk/hydrology/station/14aadf3c-3d4d-44b3-b26b-cf705827d00e_377323)

(a) October 2025



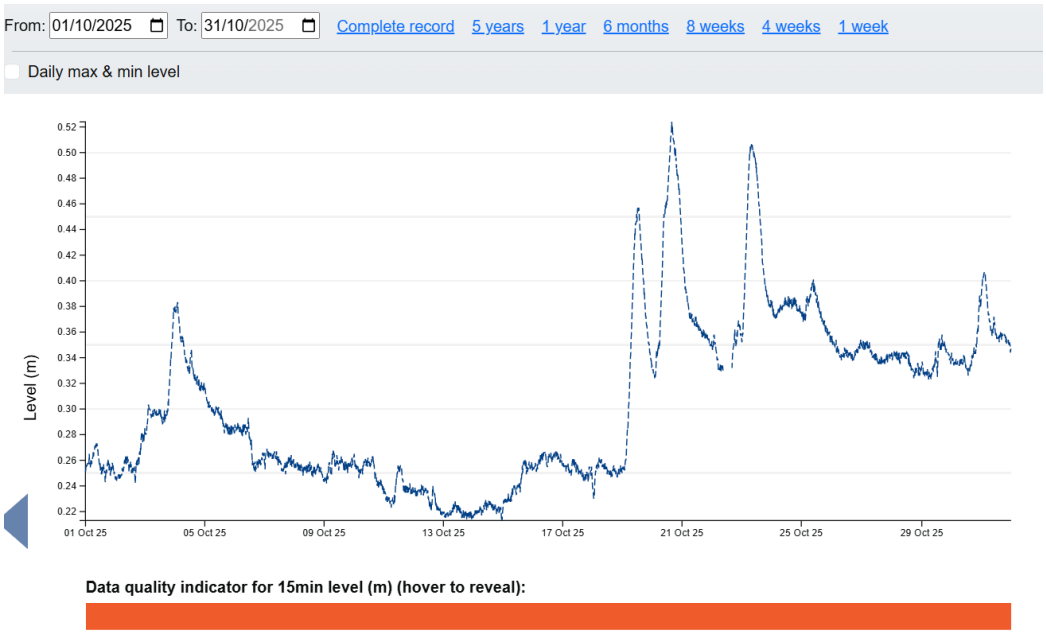
(b) From 1st October 2024 until 31st October 2025



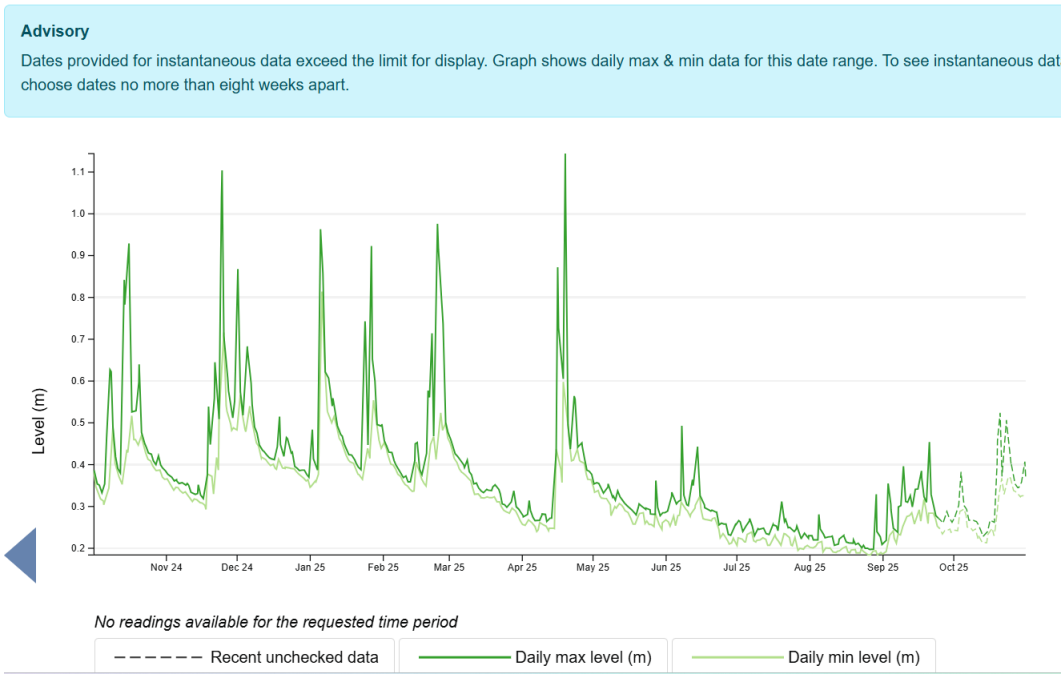
Ignore note about readings, this refers to 15 minute readings which won't show for an extended time period.

2. Par River levels at Luxulyan preceding and during surveys. Source: https://environment.data.gov.uk/hydrology/station/14aadf3c-3d4d-44b3-b26b-cf705827d00e

(a) October 2025



(b) From 1st October 2024 until 31st October 2025



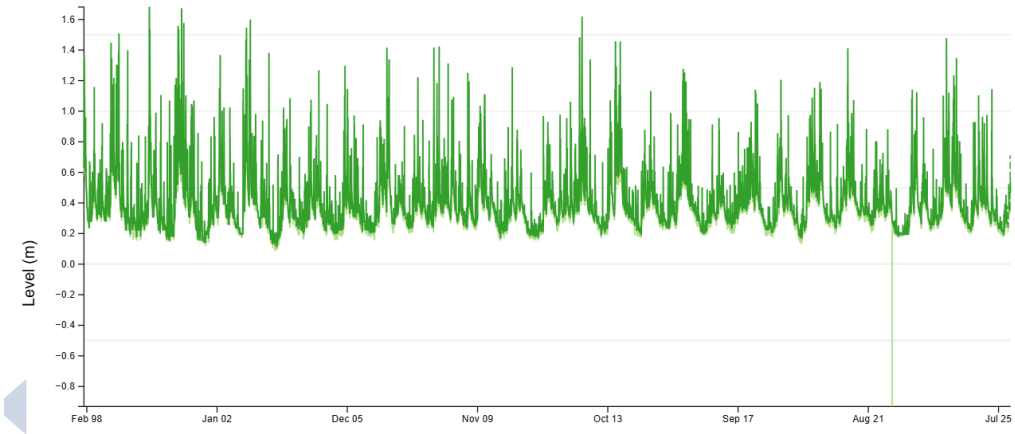
(c) How levels at Luxulyan could affect nearby areas:

1.80m	Property flooding is possible above this level. One or more flood warnings may be issued
1.68m	Water reaches the highest level recorded at this measuring station (recorded on 19 December 1999)
1.40m	Low lying land flooding is possible above this level. One or more flood alerts may be issued
	This is the top of the normal range

(d) Complete record of river levels at Luxulyan. Refer to level descriptions in previous section.

Advisory

Dates provided for instantaneous data exceed the limit for display. Graph shows daily max & min data for this date range. To see instantaneous data choose dates no more than eight weeks apart.



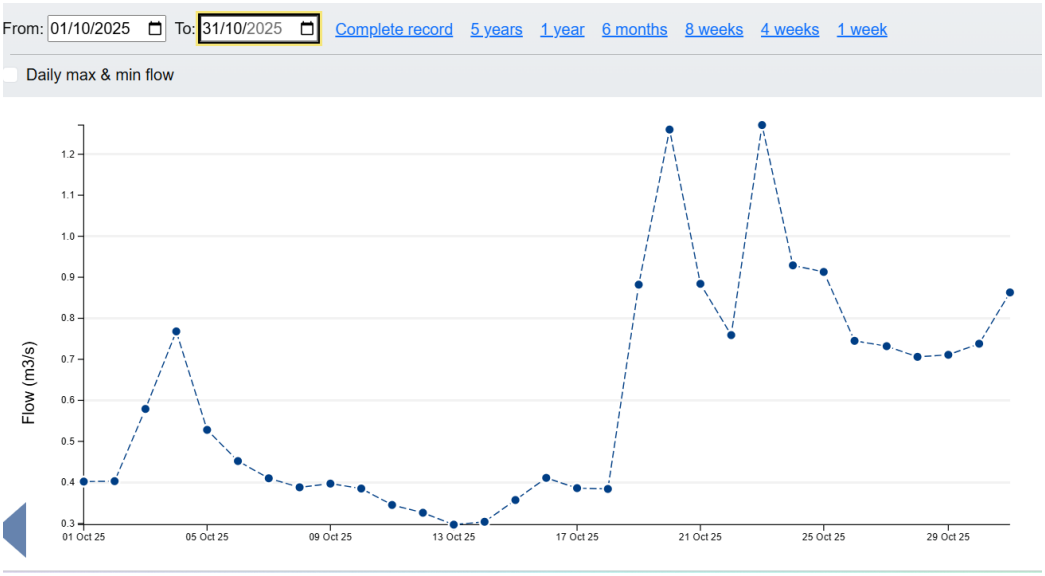
No readings available for the requested time period

Recent unchecked data | Daily max level (m) | Daily min level (m)

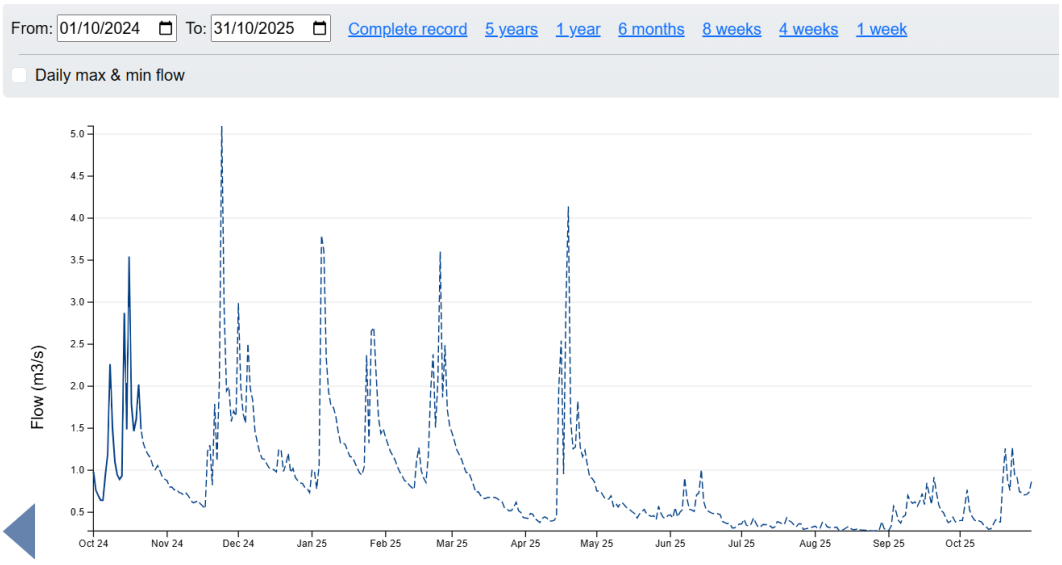
3. RIVER FLOW AT LUXULYAN (Daily Mean Flow in M3/s – cubic metres per second):

Source: https://environment.data.gov.uk/hydrology/station/d58ffa6f-8f0d-4626-b7a1-23de1774b470

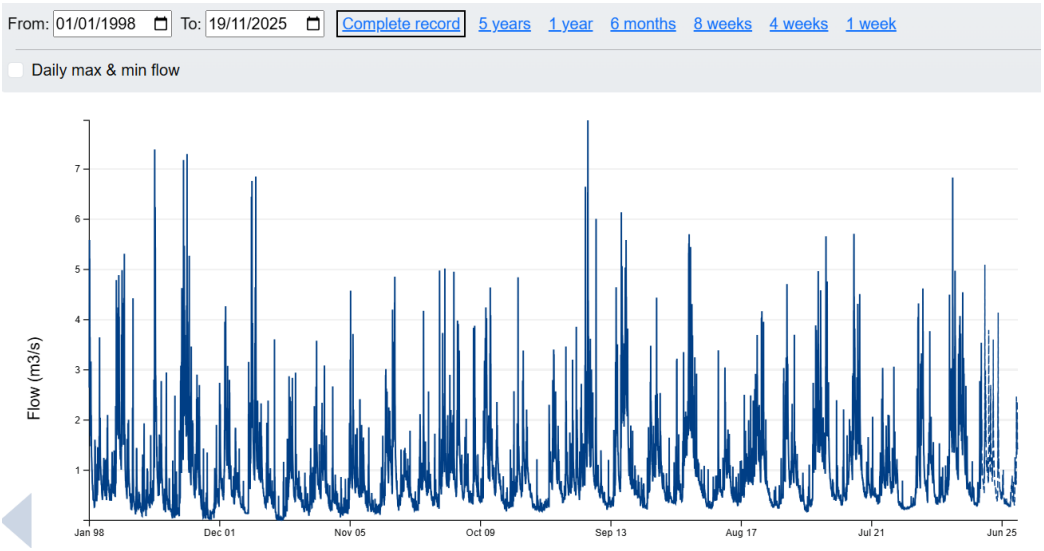
(a) October 2025 (N.B. Some data unchecked):



(b) From 1st October 2024 until 31st October 2025



(c) Complete record of river flow at Luxulyan:



4. The graphs in sections 1 to 3 are taken from Hydrology Data Explorer (https://environment.data.gov.uk/hydrology/explore). Data for Luxulyan and Par St Andrews are used here. Other stations in the Par catchment include: Ponts Vale, Par Highways, Treesmill Dam Public Footpath, Treesmill Dam Marsh Villa Gardens, and St Blazey (rainfall only). It is possible to check daily Par River levels for Luxulyan, Ponts Vale and St Blazey Station Stream at St Blazey Station Road at: https://check-for-flooding.service.gov.uk/river-and-sea-levels/rloi/3159 .

C. OCTOBER 2025 MONITORING POINTS

This month monitoring occurred at 15 locations. The Treskilling Stream was not monitored. Monitoring points along the main Par River are shown in black. Those in red are on tributaries.
Source: https://magic.defra.gov.uk/MagicMap.aspx

LOCATION	PAR/TRIBUTARY	DATE/TIME	TYPE OF CHECK	MONITORED BY
Criggan Moors, Par River, SX 01882 61133	**PAR**	15/10/2025 8:55	CSI sample & Cartographer record.	Roger Smith
South of Minorca Lane, Par River, SX02668 59747	**PAR**	15/10/2025 8:15	CSI sampling. Cartographer record.	Roger Smith
Near Forkandles Farm, Molinnis Stream, SX 02460 59271	**SECONDARY TRIBUTARY (OF CARBIS STREAM)**	15/10/2025 9:45	CSI sample & Cartographer record.	Roger Smith
Carbis Stream SX 02834 59401	**TRIBUTARY**	15/10/2025 8:00	CSI sampling. Cartographer record.	Roger Smith
Lavrean, Par River SX 03134 59164	**PAR**	15/10/2025 10:10	CSI sampling. Cartographer record.	Roger Smith
Treskilling, Treskilling Stream, SX 04107 57726	**TRIBUTARY**	Not checked		
Luxulyan allotments, Par River, SX 04732 58045	**PAR**	15/10/2025 11:05	CSI sampling. Cartographer record.	Roger Smith
Cam Bridges, Par River, SX 05292 57454	**PAR**	15/10/2025 17:05	CSI sampling. Cartographer record.	Roger Smith
Trebell Green, Bokiddick Stream SX 0551960226	**TRIBUTARY**	19/10/2025 11:00	CSI sampling. Cartographer record.	Roger Smith
Corgee Moor, Bokiddick Stream SX 0593462167	**TRIBUTARY**	19/10/2025 11:40	CSI sampling. Cartographer record.	Roger Smith
Gatty's Bridge, Bokiddick Stream SX 05531 57953	**TRIBUTARY**	15/10/2025 17:05	CSI sampling. Cartographer record.	Joan Farmer
Treffry Viaduct, Par River, SX 05650 57179	**PAR**	15/10/2025 16:50	CSI sampling. Cartographer record.	Joan Farmer
Lady Rashleigh Mine, Par River, SX 06451 56509	**PAR**	15/10/2025 14:00	CSI sampling. Cartographer record. Riverfly.	Veronica Jones, Roger Smith
Treesmill, Tywardreath Stream, SX 08873 55385	**TRIBUTARY**	15/10/2025 12:40	CSI sampling. Cartographer record.	Maggie Tagney
Par Beach slipway, SX 0776 53261	**PAR**	14/10/2025 16:50	CSI sampling. Cartographer record.	Brian Harrisson
Polmear Stream, Ship Inn SX 08749 53417	**TRIBUTARY**	14/10/2025 16:20	CSI sampling. Cartographer record.	Simon Tagney

D. THIS MONTH IN PICTURES

1. The arrival of autumn.

2. Fish bones in otter spraint found in Luxulyan Valley.

3. Fungi.

4. Autumn reflections in the Polmear Stream

Photo: Simon Tagney

5. The sun setting on the Par River near Par Beach.

Photo: Brian Harrisson

6. The Bokiddick Stream downstream from Gatty's Bridge.

Photo: Joan Farmer

7. The Lower Par river near the Treffry Viaduct.

Picturesque, highly-visited but regularly polluted with phosphates. St Austell North sewage treatment works at Luxulyan often spills sewage into the river but what is the impact on water quality?

Photo: Joan Farmer

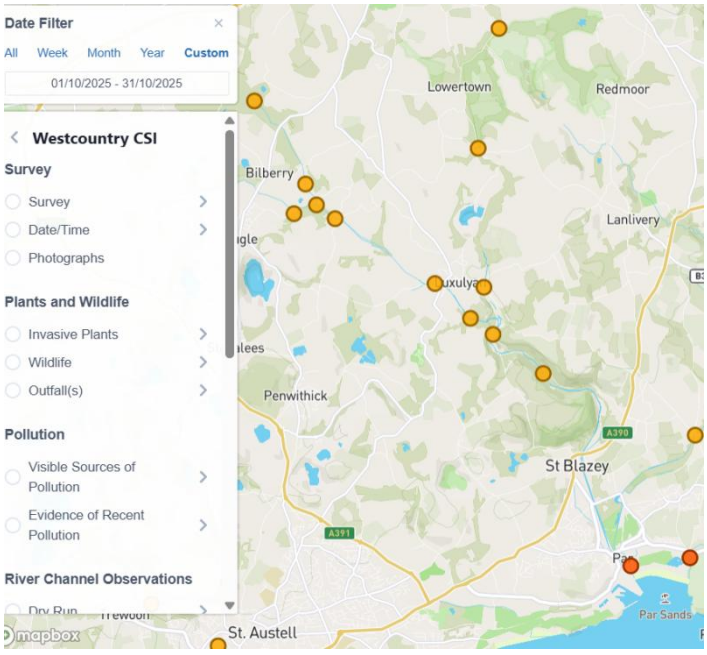
8. The impact of the beavers on the Upper Bokiddick Stream is being carefully monitored and managed by Cornwall Wildlife Trust (see protective mesh around one tree). The location has been transformed, enhancing biodiversity and slowing river flow, which will benefit places downstream.

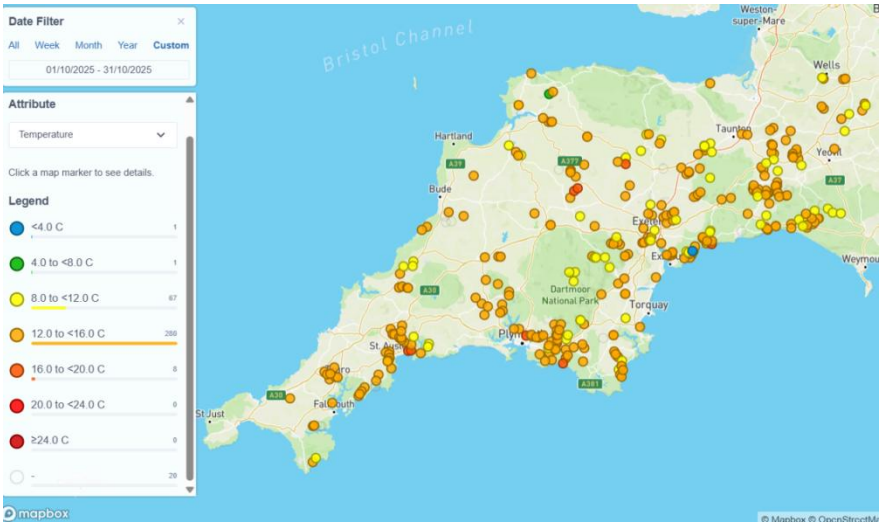
E. TEMPERATURE

1. **This is the WRT's explanation of why this is monitored:**

Temperature is a vital parameter within the river ecosystem. It controls many of the aquatic species life cycles. Temperature fluctuates with the seasons; however, you do get variation within that, particularly in small rivers and streams. Another important reason to measure temperature is to track the impact of our warming climate on our waterbodies.

Geographical comparison. Source: Cartographer.





Results October 2025

Results above the temperature at which fish and other organisms can function healthily will be shown in red. At present, 18 ˚Celsius is being used as the upper safe limit for fish and other creatures, although 20˚ Celsius has been suggested by WRT instead. The Yealm Estuary to Moor Project (YEM) in Devon considers that the upper safe level (USL) for temperature is 19.5 °C.

From December 2023 all readings have been taken with the new thermometer/TDS device. Previously, all Upper Par readings, except for Lady Rashleigh Mine, have been taken with the old device. There is a worrying discrepancy with the readings on the older devices.

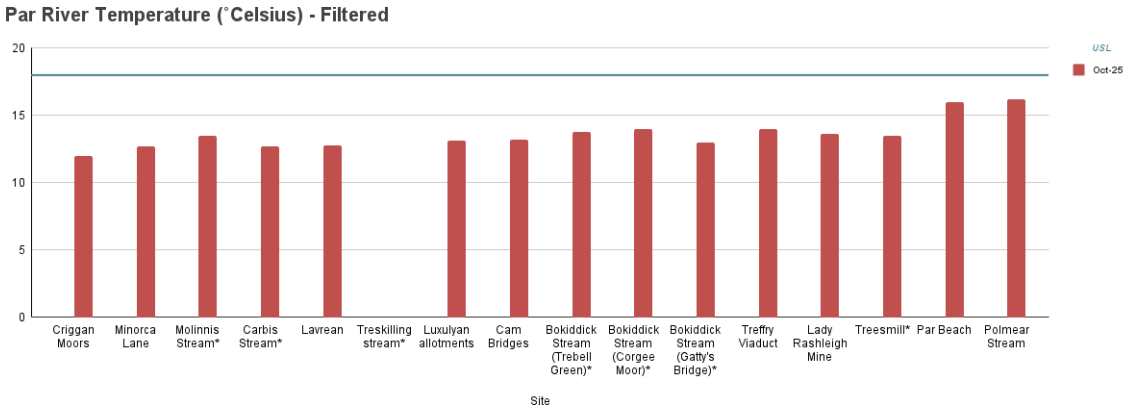
PAR RIVER/TRIBUTARY	LOCATION		Temperature ˚Celsius
Par	Criggan Moors, Par River, SX 01882 61133		**12**
Par	South of Minorca Lane, Par River, SX 02657 59788		**12.7**
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271		**13.5**
Tributary	Carbis Stream SX 02834 59401		**12.7**
Par	Lavrean, Par River SX 03134 59164		**12.8**
Tributary	Treskilling, Treskilling Stream, SX 04107 57726		**n/a**
Par	Luxulyan allotments, Par River, SX 04732 58045		**13.1**
Par	Cam Bridges, Par River, SX 05292 57454		**13.2**
Tributary	Trebell Green, Bokiddick Stream SX 0551960226		**13.8**
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167		**14**
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953		**13**
Par	Treffry Viaduct, Par River, SX 05650 57179		**14**
Par	Lady Rashleigh Mine, Par River, SX 06451 56509		**13.6**
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385		**13.5**
Par	Par Beach slipway, SX 0776 53261		**16**
Tributary	Polmear Stream, Ship Inn, SX 08749 53417		**16.2**

Colour coding:

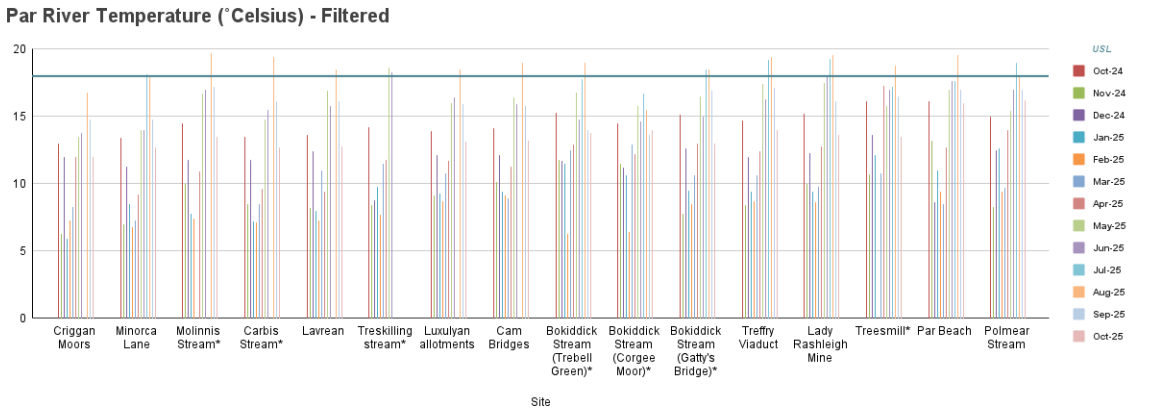
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

3. Graphs

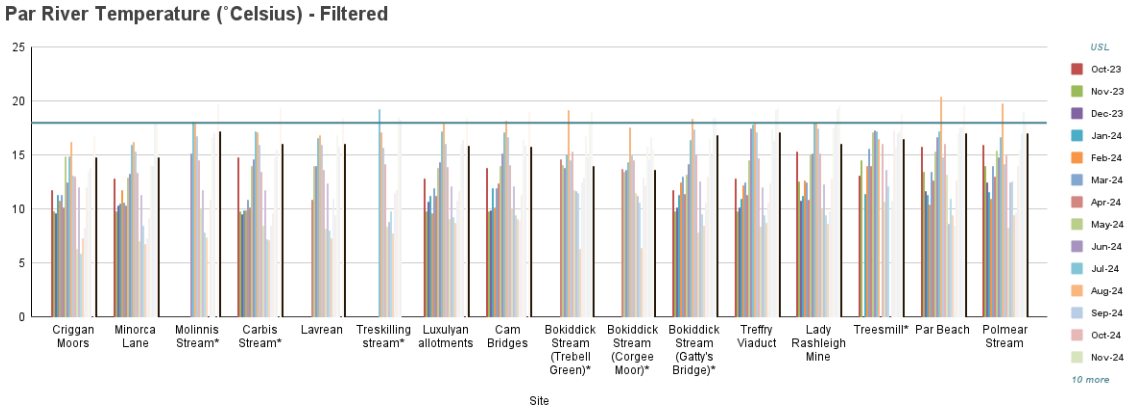
(a) This month:



(b) From 1st October 2024 to 31st October 2025:



(c) From 1st October 2023 until 31st October 2025:

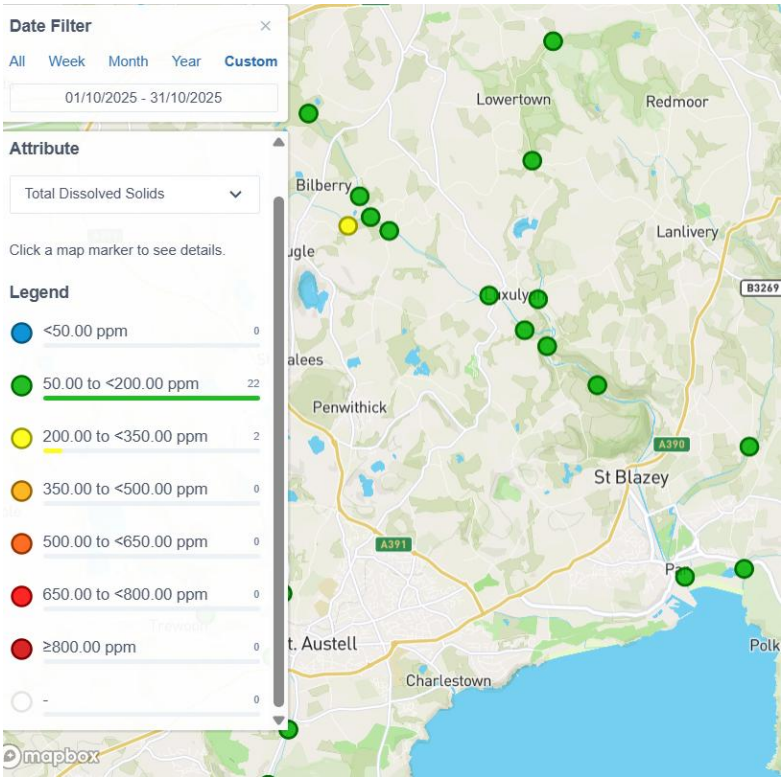


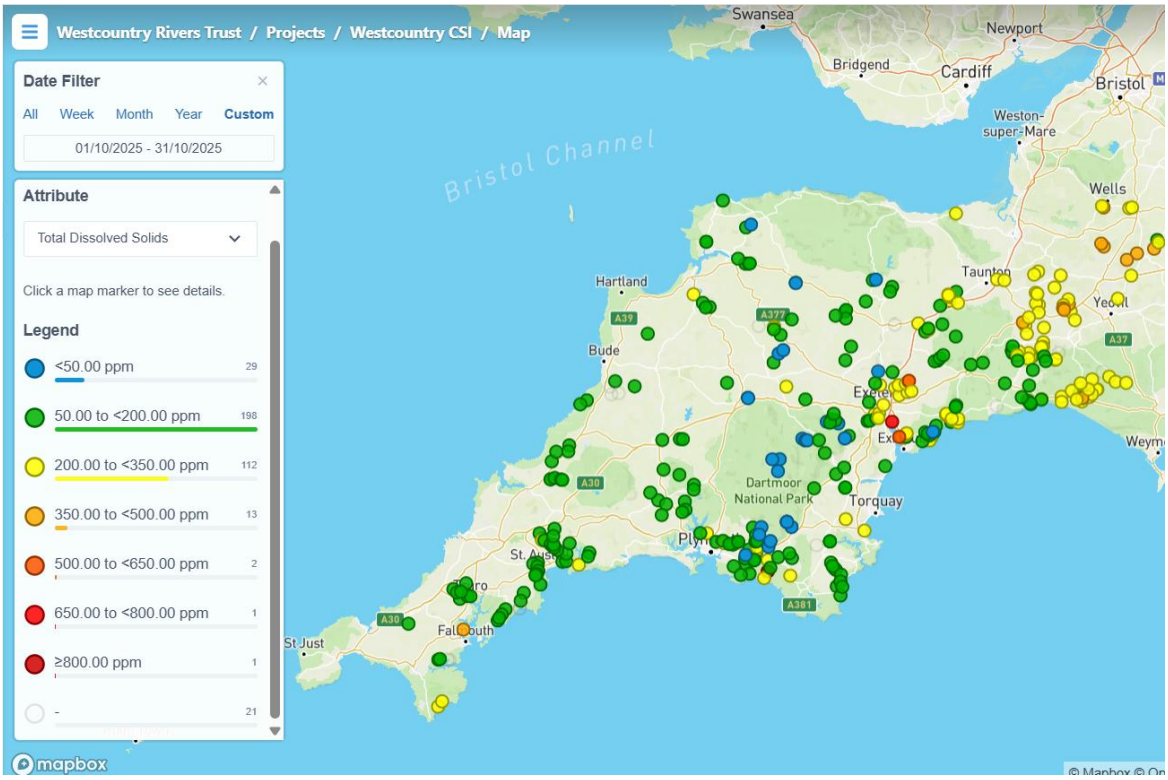
F. TOTAL DISSOLVED SOLIDS

1. We measure these in ppm (parts per million). The Yealm Estuary to Moor Project (YEM) in Devon considers that the upper safe level (USL) for turbidity is 75 NTU = 25 mg/l. This is the WRT's explanation:

Total Dissolved Solids (TDS) is directly related to the conductivity of the water. The more minerals, salts and metals that are dissolved in the water the more conductive it gets. Low levels of dissolved solids in waters such as those on Dartmoor near to the source of the river are a result of very low levels of input from the surrounding landscape. As the river runs down to the sea it collects material from many different inputs, some natural and some man-made such as farms, sewage plants, factories and residential areas. This typically increases the amount of solids dissolved in the water leading to a higher reading. Harmful pollution from things like sewage, slurry and factory discharge will usually elevate your TDS reading. However, some pollutants such as oil can lower conductivity; therefore it should be used as a general indicator of water quality not a specific measure of toxicity. Geology will influence the normal level of conductivity in a watercourse (e.g. Areas dominated by granite generally give a lower conductivity than those with limestone). Regular monitoring will allow the detection of changes in conductivity which can indicate pollution.

2. Geographical comparison. Source: Cartographer.





3. Results October 2025

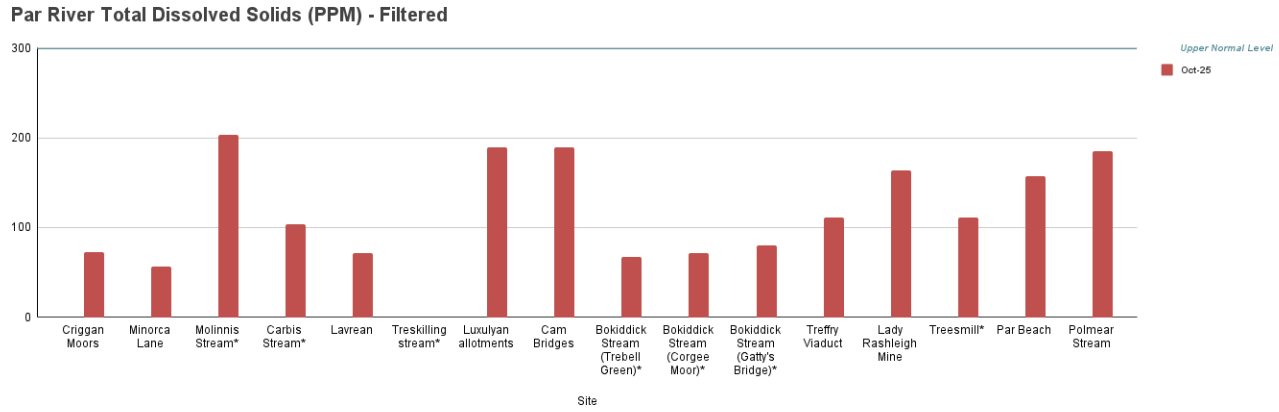
PAR RIVER/TRIBUTARY	LOCATION		Total Dissolved Solids PPM
Par	Criggan Moors, Par River, SX 01882 61133		**73**
Par	South of Minorca Lane, Par River, SX 02657 59788		**57**
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271		**203**
Tributary	Carbis Stream SX 02834 59401		**104**
Par	Lavrean, Par River SX 03134 59164		**71**
Tributary	Treskilling, Treskilling Stream, SX 04107 57726		**n/a**
Par	Luxulyan allotments, Par River, SX 04732 58045		**189**
Par	Cam Bridges, Par River, SX 05292 57454		**189**
Tributary	Trebell Green, Bokiddick Stream SX 0551960226		**67**
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167		**72**
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953		**80**
Par	Treffry Viaduct, Par River, SX 05650 57179		**111**
Par	Lady Rashleigh Mine, Par River, SX 06451 56509		**164**
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385		**111**
Par	Par Beach slipway, SX 0776 53261		**157**
Tributary	Polmear Stream, Ship Inn, SX 08749 53417		**185**

Colour coding:

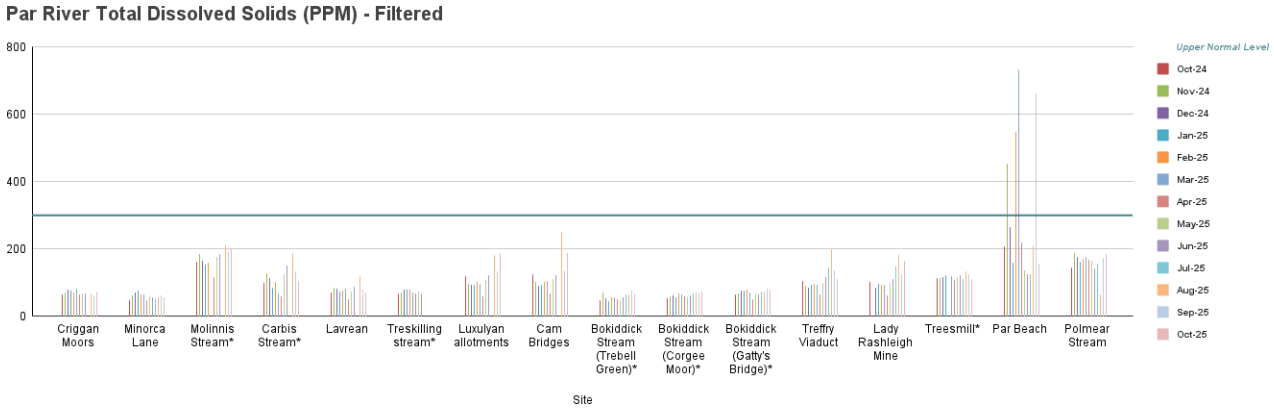
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

3. Graphs

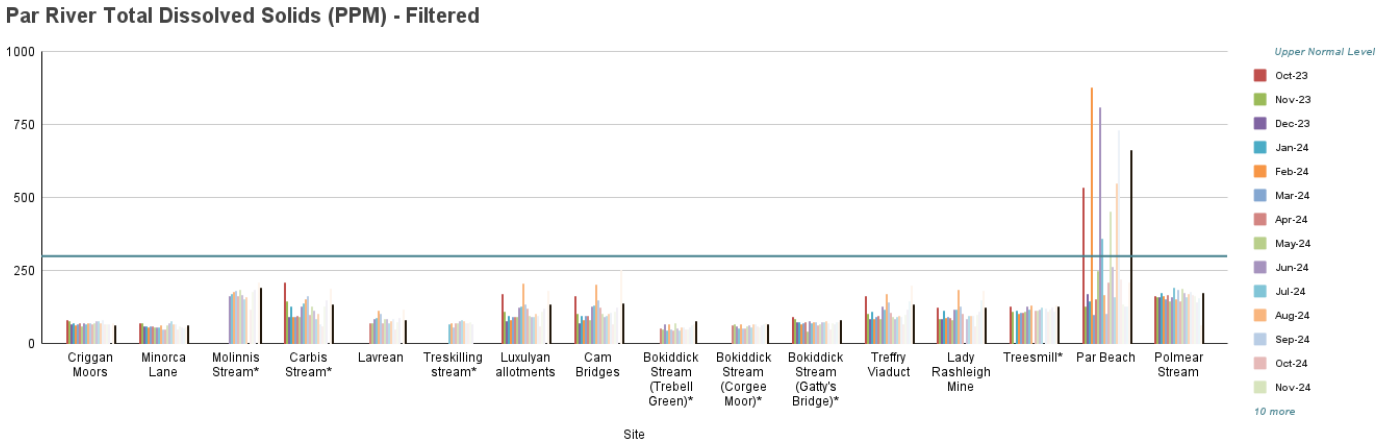
(a) This month:



(b) From 1st October 2024 until 31st October 2025



(c) From 1st October 2023 until 31st October 2025:



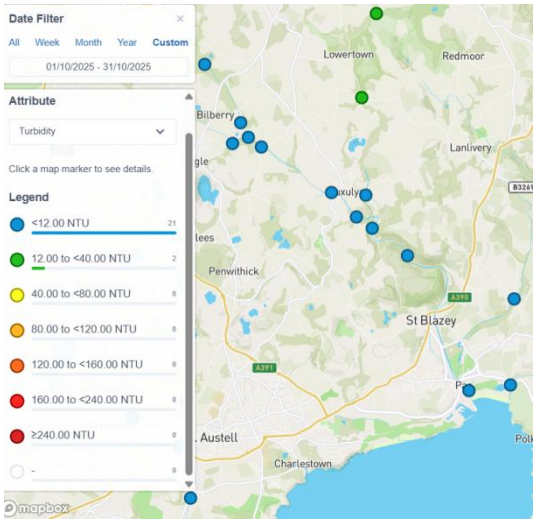
G. TURBIDITY

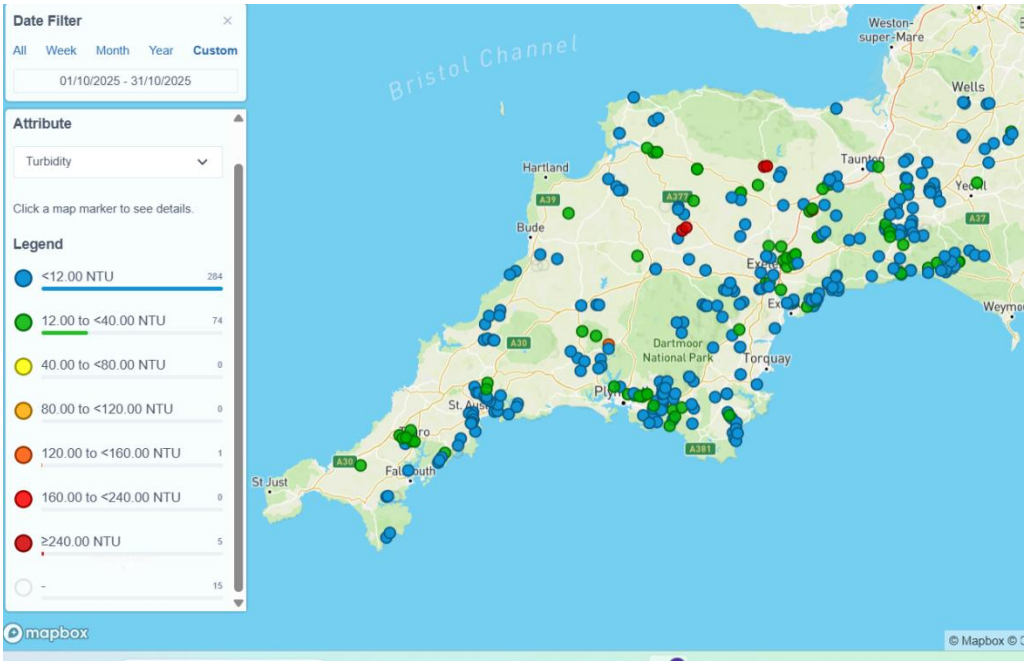
1. This is the WRT explanation of this measure:

Turbidity tube is a measure of the optical clarity of the water. The more suspended particles in the water the lower the clarity and the higher the turbidity. You will often find your waterbody gets more turbid after heavy rainfall due to soil running off the fields and sediment being mixed into the water column. This loss of topsoil is both a problem for farmer and river. It can often contain chemicals from the fertiliser and pesticides used on the land. An increase in sediment level on the substrate of the river can cause smothering of habitat by removing light and oxygen. Aquatic wildlife such as the less mobile invertebrates and fish eggs struggle to survive in low oxygen conditions and without light, plants are unable to grow. It is a good idea to sample your river after different weather conditions to understand how it responds to rainfall or drought.

The Yealm Estuary to Moor Project (YEM) in Devon considers that the upper safe level (USL) for turbidity is 75 NTU = 25 mg/l.

2. Geographical comparison. Source: Cartographer.




Date Filter
All
Week
Month
Year
Custom
01/10/2025 - 31/10/2025
Attribute
Turbidity
Click a map marker to see details.
Legend
<12.00 NTU
284
12.00 to <40.00 NTU
74
40.00 to <80.00 NTU
0
80.00 to <120.00 NTU
0
120.00 to <160.00 NTU
1
160.00 to <240.00 NTU
0
≥240.00 NTU
5
-
15
mapbox
Bristol Channel
Weston-super-Mare
Wells
Taunton
Hartland
Bude
Dartmoor National Park
Torquay
St Just
A39
A30
A38
A381
A37
© Mapbox

3. Results October 2025:

It should be noted that the sampling on the two sites on the upper Bokiddick Stream were conducted in heavy rain which may explain the slightly elevated scores.

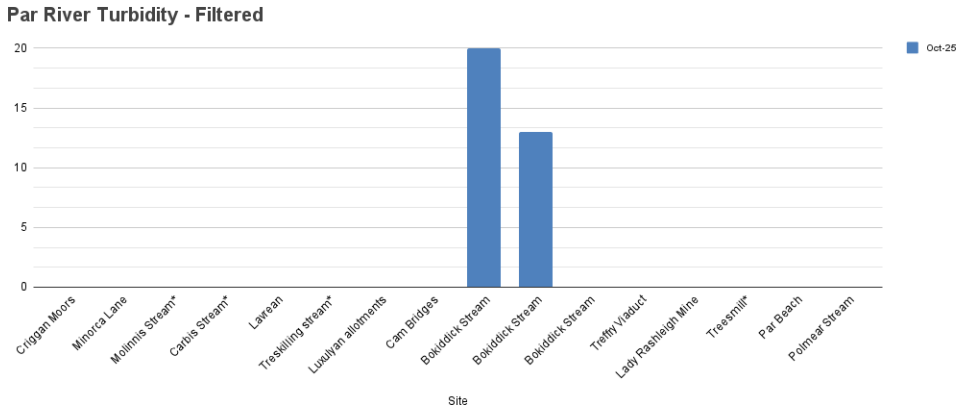
PAR RIVER/TRIBUTARY	LOCATION		Turbidity (NTU)
Par	Criggan Moors, Par River, SX 01882 61133		**<12**
Par	South of Minorca Lane, Par River, SX 02657 59788		**<12**
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271		**<12**
Tributary	Carbis Stream SX 02834 59401		**<12**
Par	Lavrean, Par River SX 03134 59164		**<12**
Tributary	Treskilling, Treskilling Stream, SX 04107 57726		**n/a**
Par	Luxulyan allotments, Par River, SX 04732 58045		**<12**
Par	Cam Bridges, Par River, SX 05292 57454		**<12**
Tributary	Trebell Green, Bokiddick Stream SX 0551960226		**20**
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167		**13**
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953		**<12**
Par	Treffry Viaduct, Par River, SX 05650 57179		**<12**
Par	Lady Rashleigh Mine, Par River, SX 06451 56509		**<12**
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385		**<12**
Par	Par Beach slipway, SX 0776 53261		**<12**
Tributary	Polmear Stream, Ship Inn, SX 08749 53417		**<12**

Colour coding:

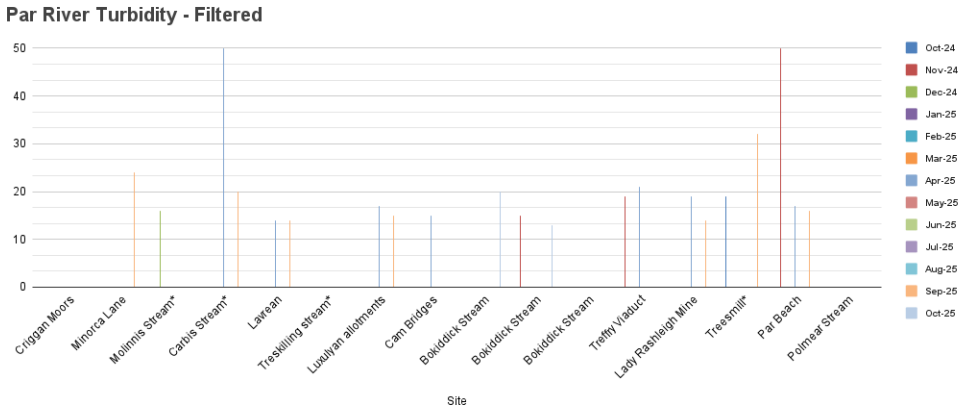
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

4. Graphs

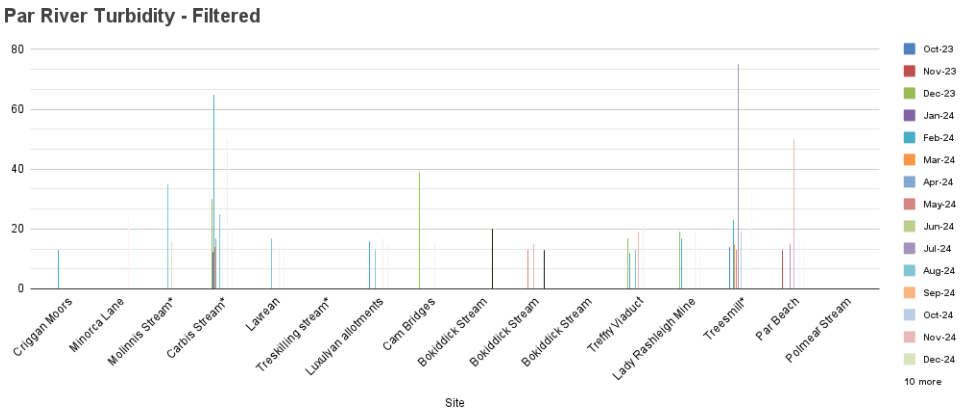
(a) This month:



(b) From 1st October 2024 until 31st October 2025:



(c) From 1st October 2023 until 31st October 2025:



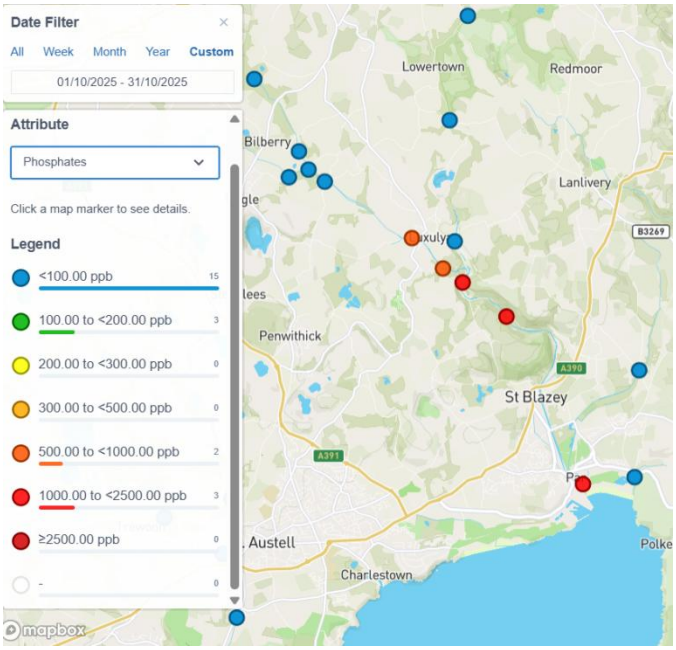
H. PHOSPHATES

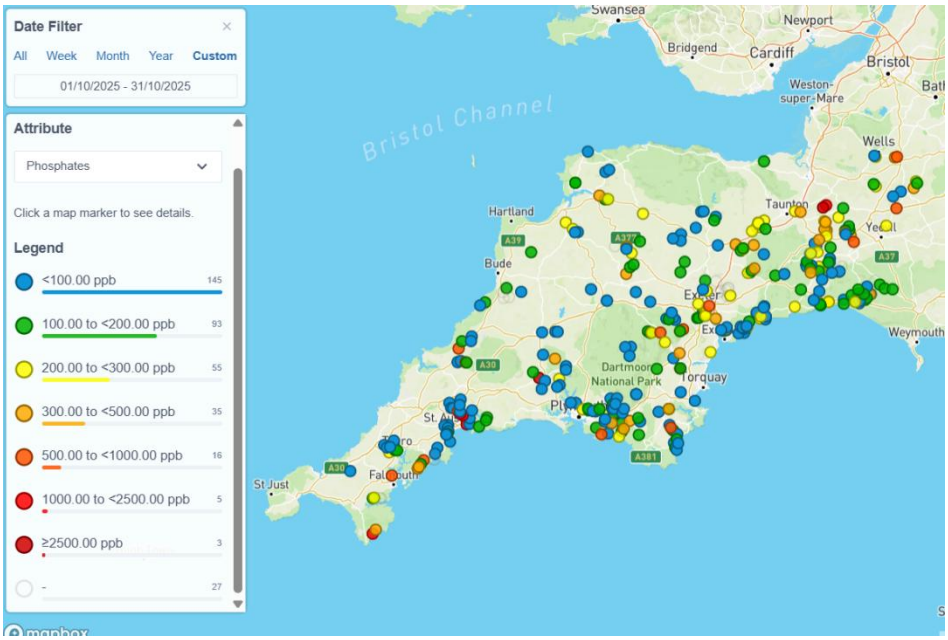
1. This is the WRT's explanation of this measure.

Phosphate occurs naturally within the river ecosystem, but in very low levels under 0.05 mg/l. Therefore, higher levels may indicate anthropogenic input. Phosphate is found in animal and human waste, cleaning chemicals, industrial runoff and fertiliser so this can be a good indicator of pollution. Having raised levels of phosphate can lead to increases in plant growth within the watercourse. This leads to a depletion of oxygen due to the plant's aerobic respiration during the night. Without oxygen aquatic species cannot survive and the river ecosystem collapses. (It is important to note that phosphate is taken up by plants. You may get a low reading but high plant growth, indicating eutrophication.) Ranges on phosphate diagnostic colour chart:

0 – 100 OK
200 – 300 HIGH
500 – 2500 – TOO HIGH

2. Geographical comparison. Source: Cartographer.





3. Results October 2025

Results in red show phosphate levels that are classified as 'High' (above the upper safe level). WRT advice is that this is 100 Parts per Billion (0.1 mg/l).

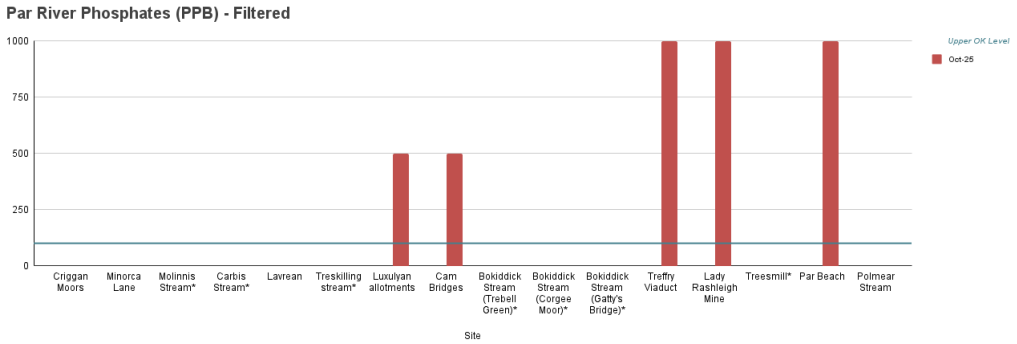
PAR RIVER/TRIBUTARY	LOCATION		Phosphates PPB
Par	Criggan Moors, Par River, SX 01882 61133		0
Par	South of Minorca Lane, Par River, SX 02657 59788		0
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271		0
Tributary	Carbis Stream SX 02834 59401		0
Par	Lavrean, Par River SX 03134 59164		0
Tributary	Treskilling, Treskilling Stream, SX 04107 57726		n/a
Par	Luxulyan allotments, Par River, SX 04732 58045		500
Par	Cam Bridges, Par River, SX 05292 57454		500
Tributary	Trebell Green, Bokiddick Stream SX 0551960226		0
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167		0
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953		0
Par	Treffry Viaduct, Par River, SX 05650 57179		1000
Par	Lady Rashleigh Mine, Par River, SX 06451 56509		1000
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385		0
Par	Par Beach slipway, SX 0776 53261		1000
Tributary	Polmear Stream, Ship Inn, SX 08749 53417		0

Colour coding:

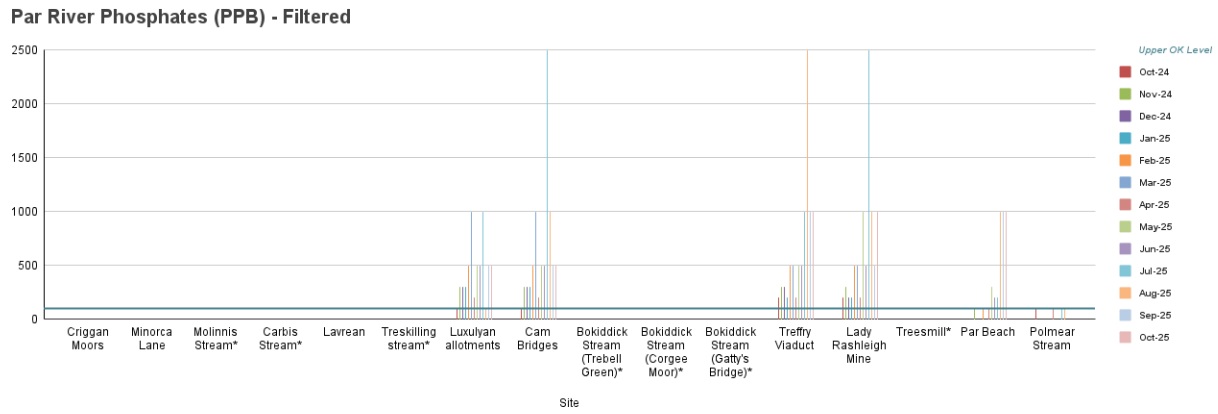
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

4. Graphs

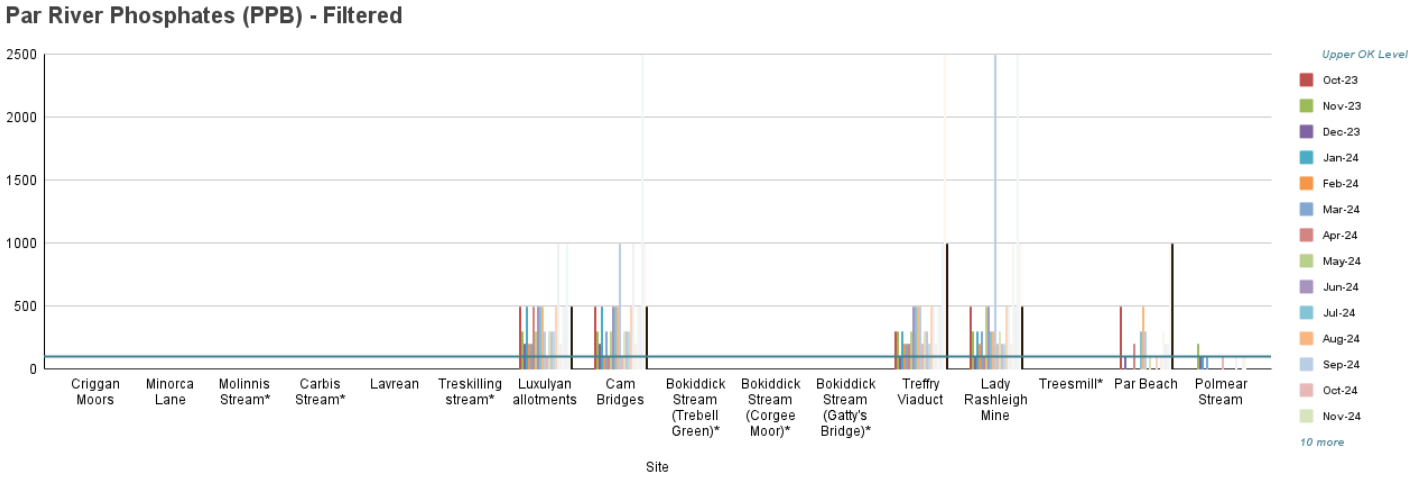
(a) This month:



(b) From 1st October 2024 until 31st October 2025:



(c) From 1st October 2023 until 31st October 2025:

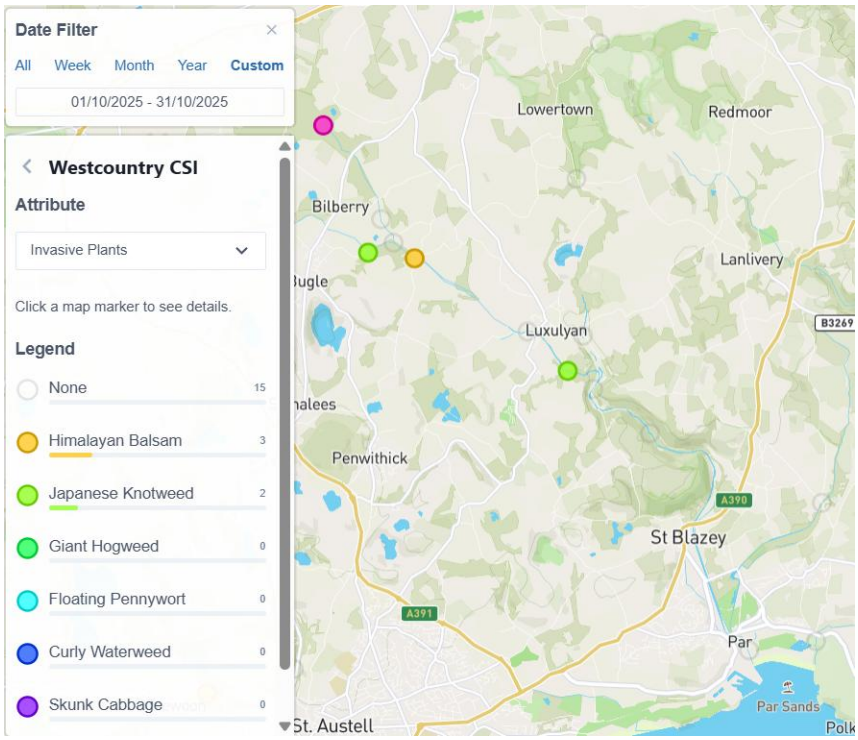


I. NITRATE

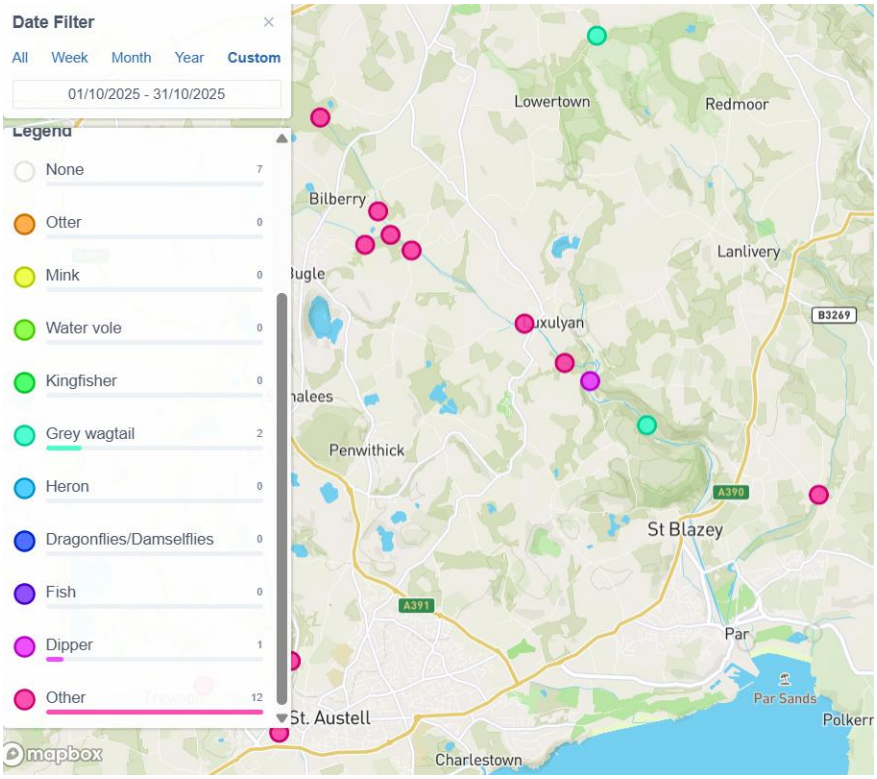
Nitrate testing began this month at all sites except Treesmill. Readings were all 0 PPM. Graphs will be generated once more results are available.

J. WILDLIFE & INVASIVE PLANTS

1. Invasive Plants sightings at the monitoring points included:



2. Wildlife spotted:



Wildlife & Invasive Plants sightings at the monitoring points included:

LOCATION	WILDLIFE NOTED		INVASIVE PLANTS NOTED
Criggan Moors, SX 01882 61133	**HEARD: Goldcrest, Song Thrush, Robin, Wren, Great Tit. SEEN: Pond Skaters.**		
South of Minorca Lane, Par River, SX 02657 59788	**HEARD: Goldcrest, Robin, Magpie, Wren, Chaffinch, Carrion Crow.**		
Forkandles Farm, Molinnis Stream, SX 02460 59271	**HEARD: Long-tailed Tit.**		Japanese Knotweed (dead?) Himalayan Balsam
Carbis Stream SX 02834 59401	**HEARD: Robin. SEEN: Pond Skaters.**		
Lavrean, Par River SX 03134 59164	**HEARD: Robin.**		Himalayan Balsam
Treskilling, Treskilling Stream, SX 04107 57726	**n/a**		n/a
Luxulyan allotments, Par River, SX 04732 58045	**HEARD: Robin, Long-tailed Tit, White Wagtail, Dunnock, Grey Wagtail, Blue Tit, Marsh Tit, Peregrine, Redwing.**		
Cam Bridges, Par River, SX 05292 57454	**SEEN: Jackdaws.**		Japanese Knotweed
Trebell Green, Bokiddick Stream SX 0551960226			
Corgee Moor, Bokiddick Stream SX 0593462167			
Gatty's Bridge, Bokiddick Stream SX 05531 57953			
Treffry Viaduct, Par River, SX 05650 57179	**SEEN: Dipper**		
Lady Rashleigh Mine, Par River, SX 06451 56509	**HEARD: Goldcrest, Robin. SEEN: Riverfly nymphs (Cased Caddis, Flat-bodied Upwings, Olives, Stoneflies, Gammarus); old otter spraint.**		
Treesmill, Tywardreath Stream, SX 08873 55385	**HEARD: Jay, Rook, Blackcap, Blackbird, Robin, Goldcrest..**		
Par Beach slipway, SX 0776 53261	**SEEN: Pigeon.**		
Polmear Stream, Ship Inn, SX 08749 53417	**SEEN: Pond Skater.**		

The Merlin Bird ID app has been used to identify birdsong (https://merlin.allaboutbirds.org/) unless stated otherwise.

Colour coding:

Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

K. ARMI RIVERFLY SURVEYS ON LOWER PAR RIVER AND TYWARDREATH STREAM

Four of the group (Joan Farmer, Veronica Jones, Roger Smith, and Simon Tagney) have undertaken the training to carry out Riverfly Surveys under the Anglers' Riverfly Monitoring Initiative (https://www.riverflies.org/rp-riverfly-monitoring-initiative). In short, sampling for 8 riverfly groups is carried out using standardised methods with scores calculated for their abundance. Information is passed to ARMI and the ORKS database. If the score does not reach a trigger level (in our case trigger level was raised from 5 to 6 in May 2022), the Environment Agency must be informed immediately since it is highly likely to indicate that the water is polluted. Our group initially received approval to sample at two sites: Luxulyan allotments (SX 04743 58054) and Lady Rashleigh Mine (SX 06453 56500). We have decided, for the time being, to concentrate on the latter, but from May 2024 moved the kick-sampling site a few metres downstream of the bridge where conditions are safer and easier. This amended site is known as Lady Rashleigh 2 in the ARMI/ORKS record. Recently, Simon and Brian have started to look at a location on the Tywardreath Stream, at SX SX0887055340.

It is impossible to count every invertebrate so this counting method is used:

Abundance	Score	Estimated Number
1-9	1	Quick count
10-99	2	Nearest 10
100-999	3	Nearest 100
>1000	4	Nearest 1000

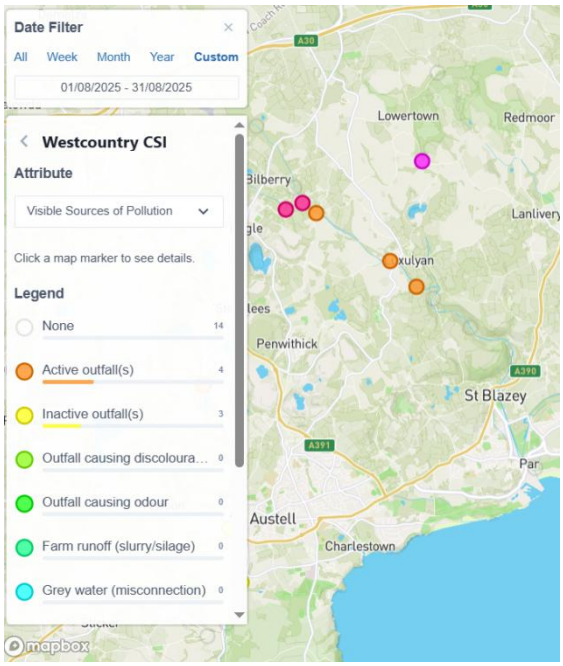
Results of survey on the Par River carried out by Joan Farmer, Veronica Jones and Roger Smith on 15th October 2025.

	SPECIES	NUMBER	CATEGORY
Trichoptera			
1	Cased Caddisfly	1	1
2	Caseless Caddisfly	0	0
Ephemeroptera 3 tails			
3	Mayfly (Ephemeridae)	0	0
4	Blue-winged olive (Ephemerellidae)	0	0
5	Flat-bodied up-wings (Heptageniidae)	10	2
6	Olives (Baetidae)	10	2
Plecoptera 2 tails			
7	Stoneflies	4	1
Gammaridae			
8	Freshwater Shrimp	30	2
			8

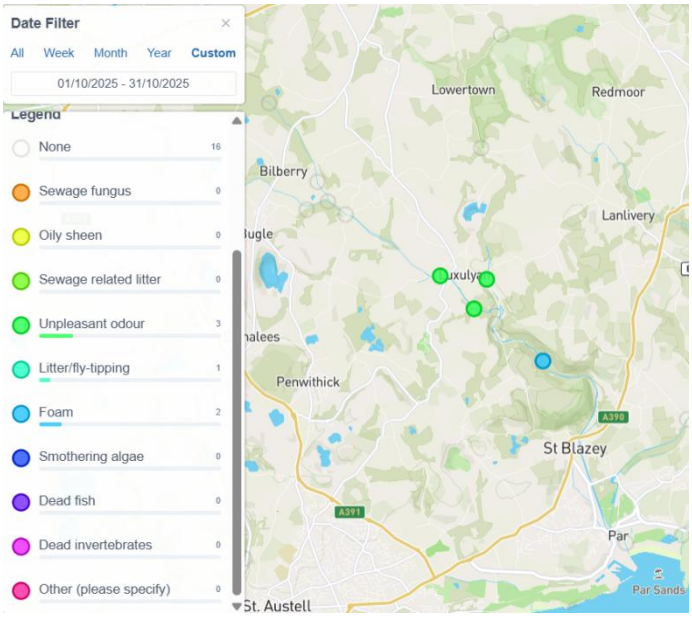
CATEGORY TOTAL	6
TRIGGER LEVEL	8

L. POLLUTION SOURCES AND EVIDENCE

1. Visible sources of pollution (source: Cartographer)



2. Evidence of recent pollution:



LOCATION		EVIDENCE OF RECENT POLLUTION
Criggan Moors, SX 01882 61133		None
South of Minorca Lane, Par River, SX 02657 59788		None
Forkandles Farm, Molinnis Stream, SX 02460 59271		None
Carbis Stream SX 02834 59401		Litter
Lavrean, Par River SX 03134 59164		Foam upstream (CSO?)
Treskilling, Treskilling Stream, SX 04107 57726		n/a
Luxulyan allotments, Par River, SX 04732 58045		Foam, phosphate
Cam Bridges, Par River, SX 05292 57454		Foam, smell (?), phosphate
Trebell Green, Bokiddick Stream SX 0551960226		None
Corgee Moor, Bokiddick Stream SX 0593462167		None
Gatty's Bridge, Bokiddick Stream SX 05531 57953		None
Treffry Viaduct, Par River, SX 05650 57179		Foam, smell, phosphate
Lady Rashleigh Mine, Par River, SX 06451 56509		Foam, phosphate
Treesmill, Tywardreath Stream, SX 08873 55385		None
Par Beach slipway, SX 0776 53261		Phosphate
Polmear Stream, Ship Inn, SX 08749 53417		None

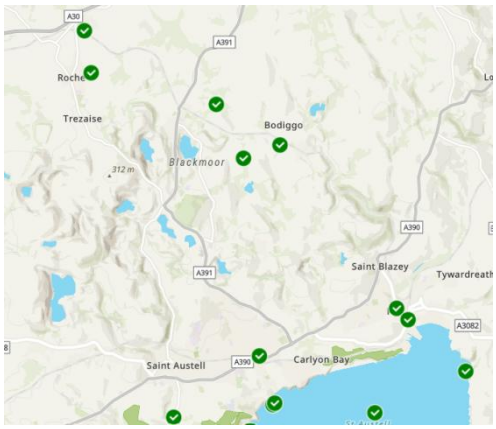
N.B. Although not noticeable at our monitoring points, there is a persistent smell of sewage in the vicinity of the Molinnis CSO even when there have been no reported discharges.

Colour coding:

Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

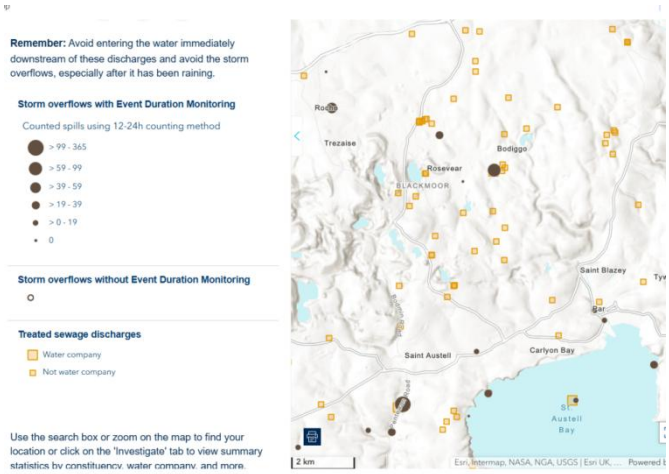
3. South West Water Storm Overflows

The Rivers Trust's sewage map (https://www.sewagemap.co.uk/) gives live information about discharges of sewage into rivers and the sea by water companies. (This is also provided by South West Water's WaterFit Live site: https://www.southwestwater.co.uk/storm-overflow-map).



This screenshot is for illustrative purposes only. Not all of the locations are in the Par River catchment.

It should be noted that there are also numerous private sewerage arrangements in the area but information about possible contamination of watercourses from these has not been found. The following screenshot shows the different facilities in the area (source: https://theriverstrust.org/key-issues/sewage-in-rivers)



(b) South West Water Storm Overflows in the Par River Catchment (updated June 2025):

The main overflows are (from source to sea along the catchment):

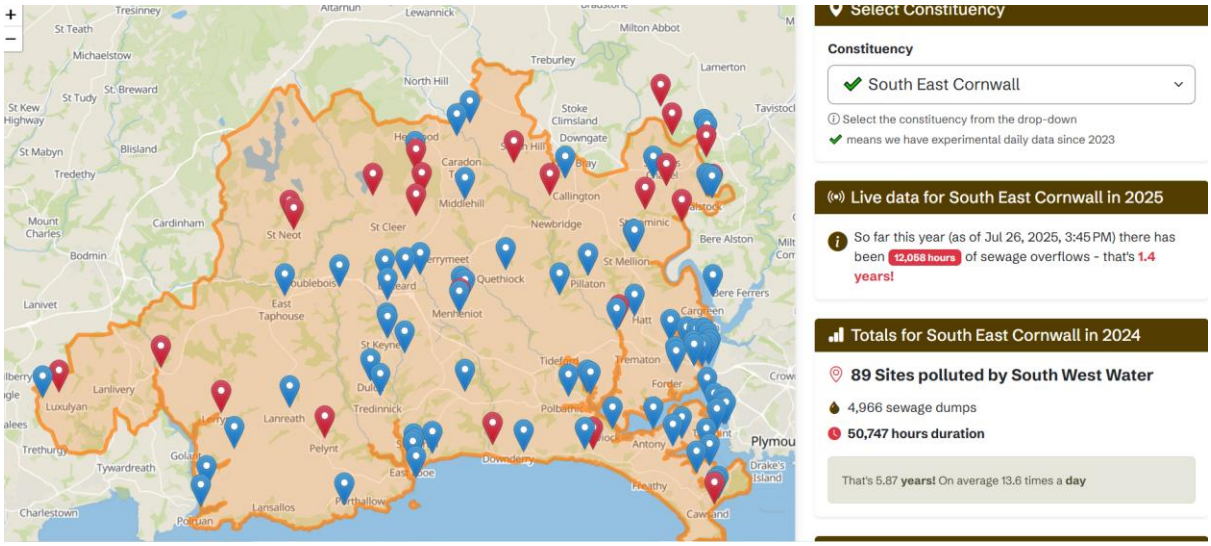
- Roche storm overflow (SWW1001)
- Molinnis storm overflow, Bugle (SWW0765)
- Rescorla storm overflow, Luxulyan (SWW0987)
- Luxulyan sewage treatment works settled storm overflow, St Austell (SWW0694)
- Tredenham Close storm overflow, Par (SWW1230)
- Par No2 pumping station overflow, Par (SWW0519)

(c) SWW Storm Overflow spills October 2025 (https://theriverstrust.org/sewage-map**).** This **may not be accurate** because the map wasn't monitored regularly so a proper record was not kept.

DATE	ROCHE 1001	MOLINNIS 0765	RESCORLA 0987	ST AUSTELL NORTH (LUXULYAN) 0694	TREDENHAM CLOSE 1230	PAR No. 2 0519
TOTAL SPILLAGE TIME (HOURS)	0	0	0	0	0	0

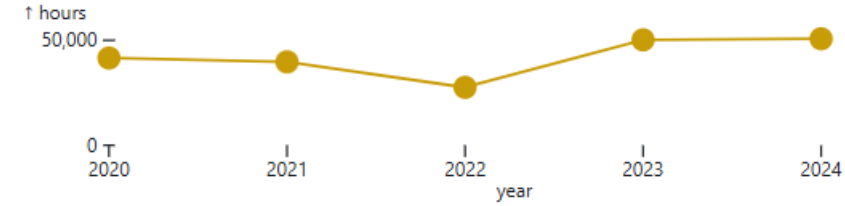
(e) South West Water sewage spills by Parliamentary constituency

(i) South-East Cornwall (https://top-of-the-poops.org/constituency/south-east-cornwall **)**



That's 5.87 **years!** On average 13.6 times a **day**

Change Over Time

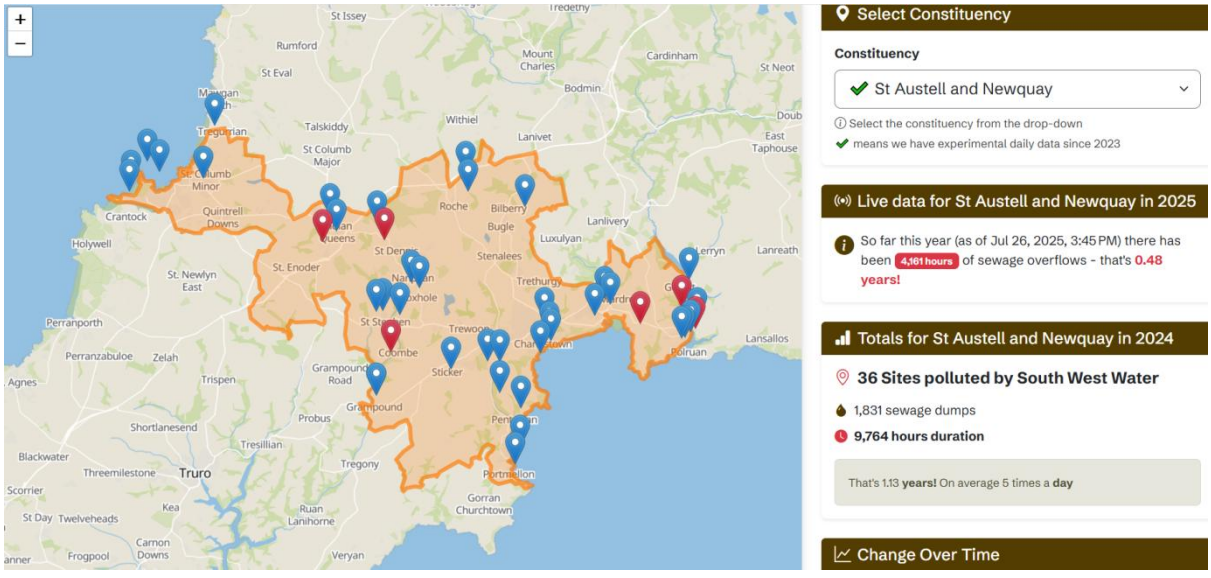


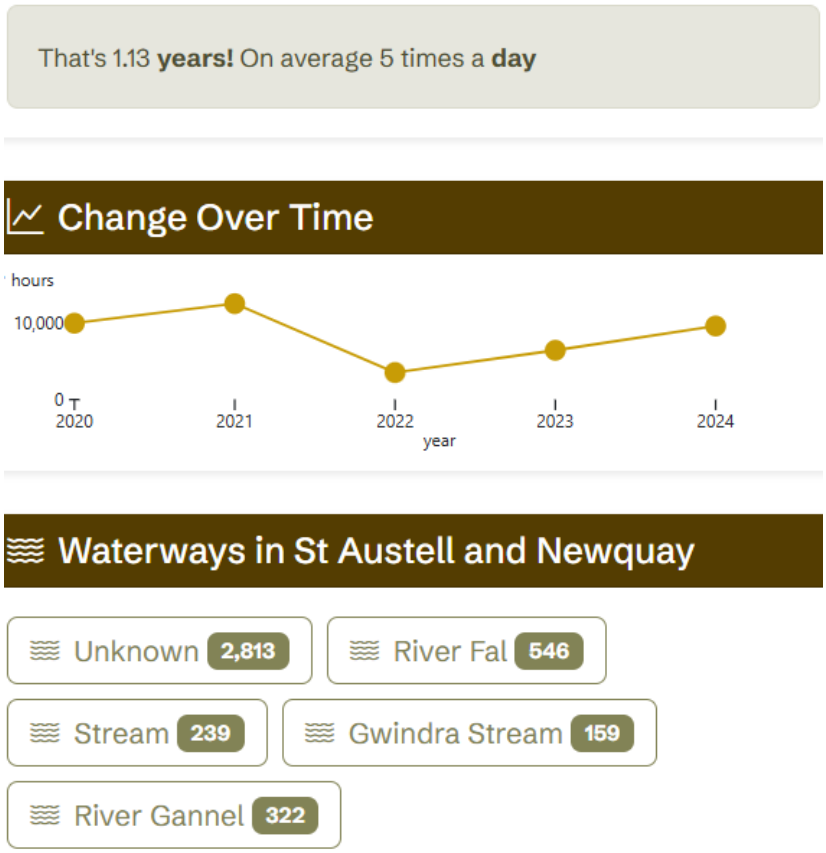
Waterways in South East Cornwall

Unknown 2,813	River Tamar 2,001
River Fowey 299	River Seaton 403
River Lynher 272	

The Par/Luxulyan River will be included in 'Unknown'.

(ii) St Austell and Newquay





(iii) South-East Cornwall and St Austell and Newquay Parliamentary constituency sewage spills national rankings 2024.

	National rank	Sewage dumps	Change (dumps)	Duration (hours)	Change (hours duration)
SE Cornwall	**11/650**	**4966**	**↓ -738**	**50,747**	**↑ 530**
St Austell & Newquay	**129/650**	**1831**	**↑ 218**	**9,764**	**↑ 3223**

M. HOW TO REPORT RIVER POLLUTION

HOW TO REPORT RIVER POLLUTION

River pollution can now be reported **online** to the Environment Agency at: https://www.gov.uk/report-water-pollution .

Use this service to report water pollution in:

- rivers or the sea
- lakes or reservoirs
- canals
- smaller streams or watercourses (for example, a brook or culvert)

Water pollution can include:

- sewage
- waste, spills or leaks from farms
- waste, spills or leaks from factories or other industry
- spills or leaks from objects

If you're unable to use the online service, you can **call** the Environment Agency:

Environment Agency incident hotline

Telephone: **0800 80 70 60**

24-hour service

N. OUR GROUP AND SUPPORTERS

Monitoring is part of the Citizen Science programme run by the West Country Rivers Trust (WCRT) and is carried out monthly by volunteers, including Joan Farmer; Veronica Jones; Roger Smith; Simon Tagney; Maggie Tagney; and Brian Harrisson. They have received training from Lydia Ashworth, Junior Evidence and Engagement Officer of the West Country Rivers Trust (https://wrt.org.uk/project/become-a-citizen-scientist/). Results are logged on the Cartographer website. The support and advice given by Ross Tonkin, Lloyd Paynter, David Edwards, Claire and Gary Phillips, Jenny Heskett, Nick Taylor, Jeremy Roberts, Mat Bateman, Colin Pringle, Matt Healey, Simon Browning, Lydia Deacon, Jack Middleton, Anna Seal, Anna Crane, Zoe Connelly, Jade Neville, Lauren Jasper, Callum Lewis, Gwen Maggs, Oscar Miller and Sasha Pinto is greatly appreciated. The work carried out by the late Dave Burrell both in the field and in checking reports will not be forgotten. The interest and encouragement offered by Environment Agency officers, especially Lisa Best, Lisa Goodall, Layla Ousley, Jenny Davies, Leah Steward, Nicola Rogers, Peter Scobie, and Sally Turberville have been invaluable.

Report compiled by Roger Smith, 21st November 2025