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.

NOVEMBER 2025

CONTENT	PAGES

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

1. Data

We sampled at 16 locations between 18th and 24th November 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 8.68 Median 8.7 Min 7.6 Max 9.7	Mean 8.6 Median 8.9 Min 7.3 Max 9.6	Mean 9.3 Median 9.25 Min 8.8 Max 10	Mean 10.5 Median 10.5 Min 8.4 Max 12.6
TOTAL DISSOLVED SOLIDS PPM (SHOULD NOT EXCEED 300 PPM)	Mean 81 Median 79 Min 66 Max 95	Mean 269.66 Median 94 Min 88 Max **627**	Mean 96.5 Median 80.5 Min 57 Max 194	Mean 141 Median 141 Min 119 Max 163
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 0 Median 0 Min 0 Max 0	Mean 0 Median 0 Min 0 Max 0
PHOSPHATES PPB (SHOULD NOT EXCEED 100 PPB)	Mean 100 Median 0 Min 0 Max **300**	Mean 100 Median 100 Min 0 Max **200**	Mean 0 Median 0 Min 0 Max 0	Mean 50 Median 50 Min 0 Max 100
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)	Riverfly surveys will resume in the Spring.			
KEY WILDLIFE (WRT KEY SPECIES ONLY* – FOR FULL LIST SEE SECTION I)			Beaver lake.	
INVASIVE PLANTS	Japanese Knotweed		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) Positive signs

(i) Phosphate levels were relatively low but only because of dilution resulting from heavy rainfall swelling the river flow.

(ii) There has been an encouraging response from EA officials and Anna Gelderd M.P. to information about sewage spills from SWW facilities this month (see Points of Concern and Section L). The EA is looking at the spills from St Austell North STW at Luxulyan while Anna has been putting pressure on the SWW hierarchy (see Section L).

(b) Points of concern

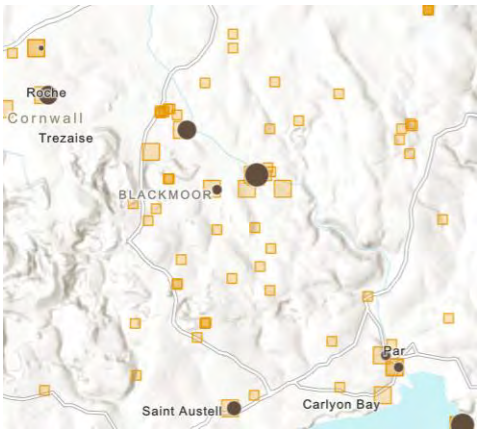
(i) The 6 SWW sewer combined sewer overflows discharging into the Par and its tributaries discharged frequently, with one, St Austell North STW, spilling filtered sewage for 304 hours 23 minutes. (At the time of writing – 24th December, at 18:08 – the spill from St Austell North that began on 30th November has been continuous for **572 hours 21 minutes**.)

(ii) Total Dissolved Solids at Par Beach were 627 PPM (Parts per Million). Following the practice of the Yealm Estuary to Moor Project (YEM) in Devon the upper safe level (USL) for TDS may be considered to be 300 PPM. While not as elevated, scores were also elevated on the china clay streams (Molinnis 194 PPM and Carbis, 107 PPM) and on the tributaries in the lower catchment (Tywardreath Stream at 119 PPM and Polmear at 163 PPM).

(iii) The heavy rainfall led to high river levels, although not to flooding at Luxulyan, which is the location monitored in these reports. The Par River in particular has been straightened over most of its course which, along with the granite geology, means that levels rise rapidly.

(c) Areas for further research

(i) Attention is focused on spillages of filtered sewage from SWW facilities in periods of high rainfall, but there are potentially other sources of sewage pollution in the form of misconnections and private sewerage arrangements, which may be considered a 'known unknown'. The screenshot below is taken from The Rivers Trust website: https://theriverstrust.org/sewage-map . The brown circles are SWW facilities while the squares indicate other sewerage arrangements. These may all be completely compliant and no suggestion is being made that any are spilling sewage, but certainty is impossible without data. (Some of the locations are beyond the Par catchment.)



(ii) The M.P. for South East Cornwall, Anna Gelderd, has had extensive discussions with SWW about sewage discharges and has raised concerns about plastic pollution in the form of bio-beads. The Environment Agency provides this description:

What are these small (approx. 5mm) plastic pellets, known as 'bio-beads', and what are they used for?

They are called 'bio-beads' because they support the biological breakdown of sewage effluent when used in sewage treatment works, but they are not biologically active themselves. Essentially, they just provide a surface for billions of microscopic bacteria to call home.

In the wastewater treatment process, once solid matter has been removed, liquid sewage effluent is passed into aerated tanks containing millions of these beads. The bacteria living on them then get to work devouring the remaining organic matter in the liquid.

If the sewage effluent went directly into rivers or seas, without that treatment stage, naturally occurring bacteria would do the same. But as many bacteria require oxygen to break down the organic matter they would strip the oxygen from the local environment (as opposed to within the treatment works), potentially harming anything that needs oxygen to survive, like fish.

There is a potential not only of contamination from the chemicals used in manufacturing bio-beads but also for wildlife that might mistake them for food. The Environment Agency's information about them is available here: https://environmentagency.blog.gov.uk/2025/12/11/bio-beads-what-are-they-what-are-they-used-for-and-what-risk-do-they-pose-to-the-environment/ .

Without data it is impossible to say if the Par River has been affected but there have been bio-bead spills elsewhere in Cornwall as this account shows: https://www.sas.org.uk/updates/bio-bead-case-studies/ .

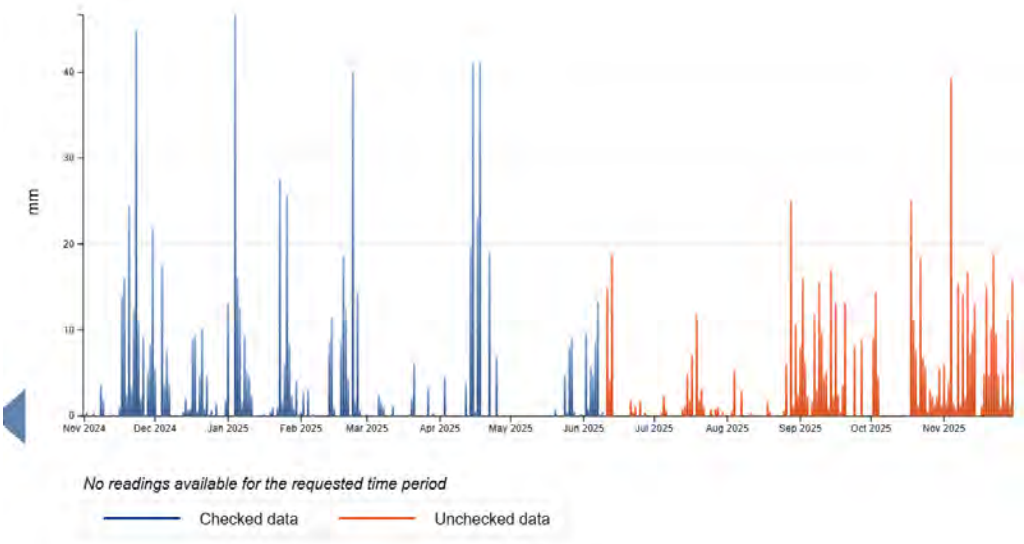
(iii) The Par River and other streams have an impact on bathing water quality at Par. The Environment Agency monitored Par Beach bathing water between May 1st and September 30th 2025, giving a rating of **Good** (**Sufficient** in 2024). Until the EA receives adequate funding from the government, all-year-round monitoring will not occur, nor will it be possible to provide regular bacteria testing on the river and its tributaries.

B. RAINFALL, RIVER LEVELS AND FLOW

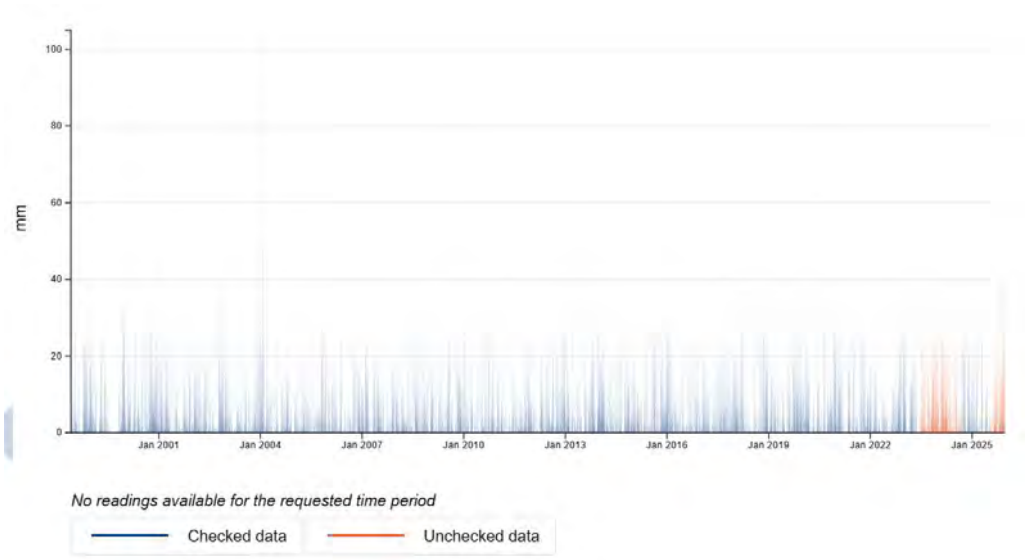
1. Rainfall at Luxulyan (https://environment.data.gov.uk/hydrology/station/14aadf3c-3d4d-44b3-b26b-cf705827d00e_377323)

(a) November 2025

(b) From 1st November 2024 until 30th November 2025

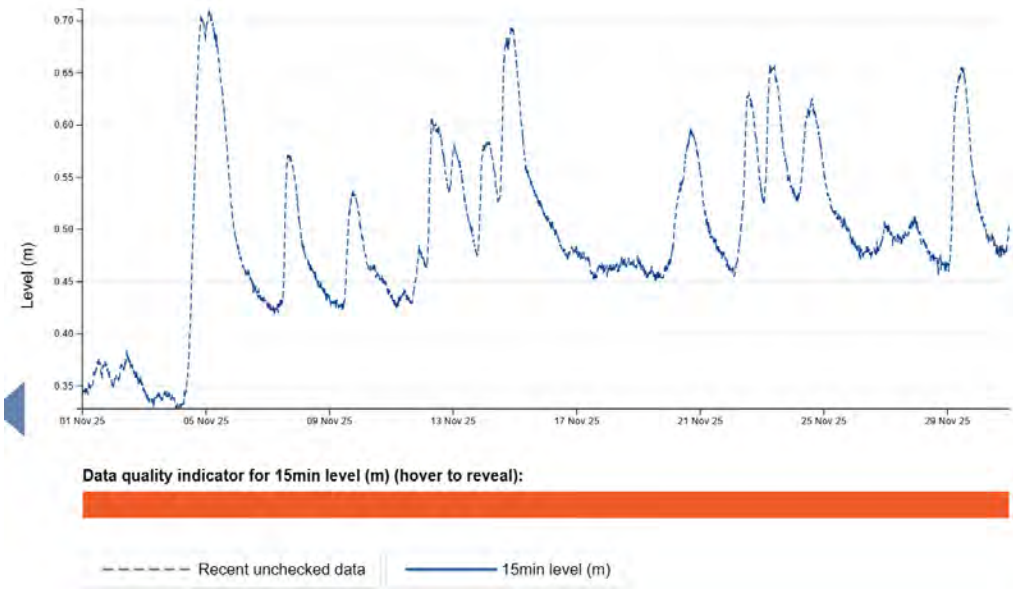


(c) Complete record:

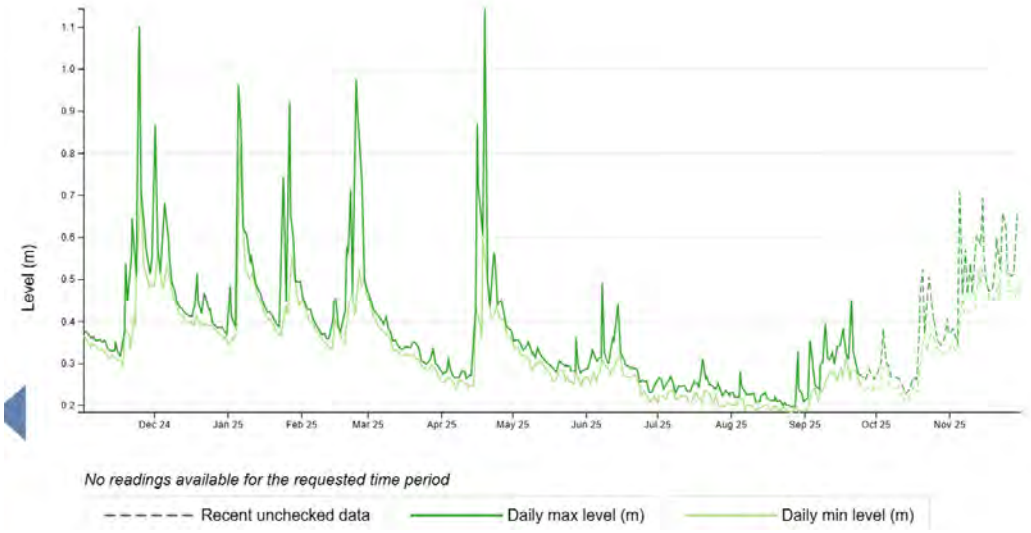


2. Par River levels at Luxulyan preceding and during surveys. Source: https://environment.data.gov.uk/hydrology/station/14aadf3c-3d4d-44b3-b26b-cf705827d00e

(a) November 2025



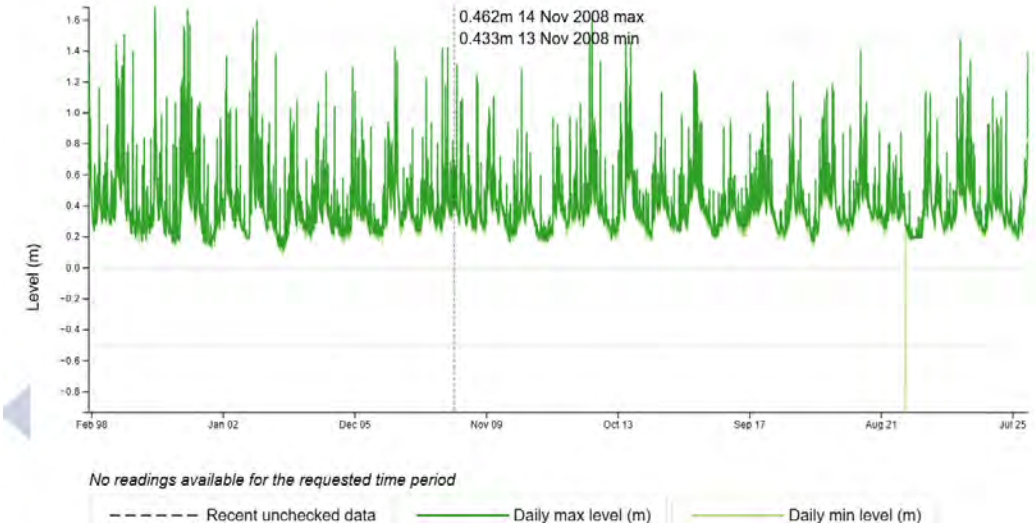
(b) From 1st November 2024 until 30th November 2025:



(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.

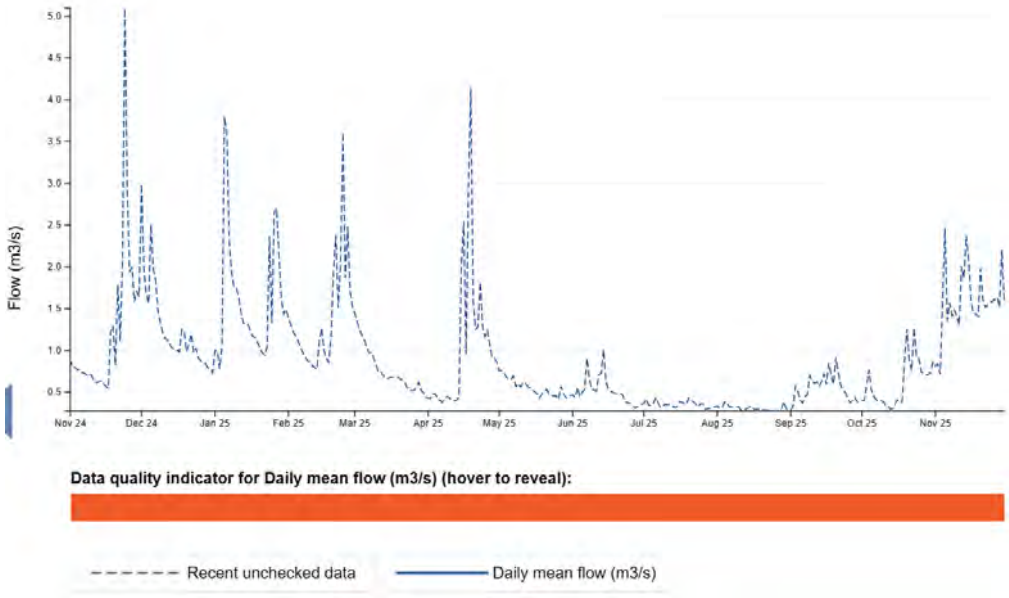


3. RIVER FLOW AT LUXULYAN (Daily Mean Flow in M3/s – cubic metres per second):

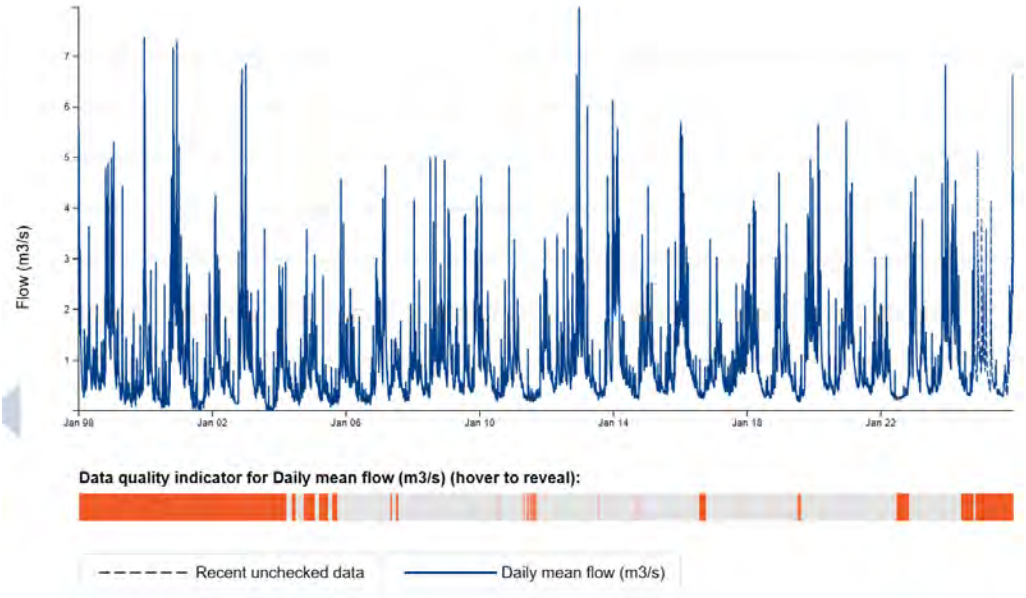
Source: https://environment.data.gov.uk/hydrology/station/d58ffa6f-8f0d-4626-b7a1-23de1774b470

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

(b) From 1st November 2024 until 30th November 2025:



(c) Complete record of river flow at Luxulyan:

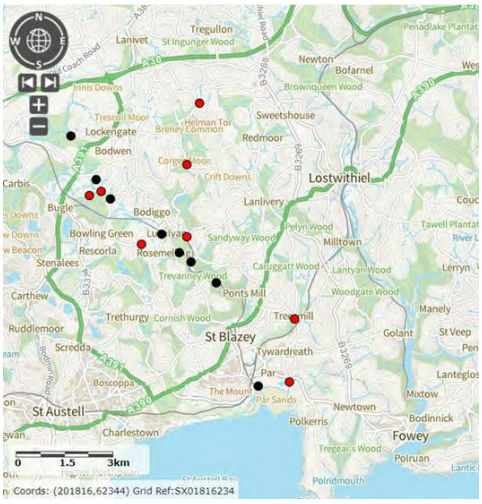


4. The graphs in sections 1 to 3 are taken from Hydrology Data Explorer (https://environment.data.gov.uk/hydrology/explore). Data for Luxulyan and Par St Andrews are used here. Other stations in the Par catchment include: Ponts Vale, Par Highways, Treesmill Dam Public Footpath, Treesmill Dam Marsh Villa 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. NOVEMBER 2025 MONITORING POINTS

This month monitoring occurred at 16 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

This month monitoring occurred at 16 locations. 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



The times have been included in the table in case that explains some of the variations in readings.

LOCATION	PAR/TRIBUTARY	DATE/TIME	TYPE OF CHECK	MONITORED BY
Criggan Moors, Par River, SX 01882 61133	**PAR**	19/11/2025 10:20	CSI sample & Cartographer record.	Roger Smith
South of Minorca Lane, Par River, SX02668 59747	**PAR**	19/11/2025 10:40	CSI sampling. Cartographer record.	Roger Smith
Near Forkandles Farm, Molinnis Stream, SX 02460 59271	**SECONDARY TRIBUTARY (OF CARBIS STREAM)**	19/11/2025 11:05	CSI sample & Cartographer record.	Roger Smith
Carbis Stream SX 02834 59401	**TRIBUTARY**	19/11/2025 9:25	CSI sampling. Cartographer record.	Roger Smith
Lavrean, Par River SX 03134 59164	**PAR**	19/11/2025 11:25	CSI sampling. Cartographer record.	Roger Smith
Treskilling, Treskilling Stream, SX 04107 57726	**TRIBUTARY**	19/11/2025 12:10	CSI sampling. Cartographer record.	Roger Smith
Luxulyan allotments, Par River, SX 04732 58045	**PAR**	19/11/2025 12:30	CSI sampling. Cartographer record.	Roger Smith
Cam Bridges, Par River, SX 05292 57454	**PAR**	19/11/2025 13:35	CSI sampling. Cartographer record.	Roger Smith
Trebell Green, Bokiddick Stream SX 0551960226	**TRIBUTARY**	18/11/2025 10:40	CSI sampling. Cartographer record.	Roger Smith
Corgee Moor, Bokiddick Stream SX 0593462167	**TRIBUTARY**	19/11/2025 10:05	CSI sampling. Cartographer record.	Roger Smith
Gatty's Bridge, Bokiddick Stream SX 05531 57953	**TRIBUTARY**	19/11/2025 12:30	CSI sampling. Cartographer record.	Joan Farmer
Treffry Viaduct, Par River, SX 05650 57179	**PAR**	19/11/2025 12:00	CSI sampling. Cartographer record.	Joan Farmer
Lady Rashleigh Mine, Par River, SX 06451 56509	**PAR**	19/11/2025 14:10	CSI sampling. Cartographer record.	Veronica Jones, Roger Smith
Treesmill, Tywardreath Stream, SX 08873 55385	**TRIBUTARY**	24/11/2025 12:30	CSI sampling. Cartographer record. Riverfly.	Brian Harrisson
Par Beach slipway, SX 0776 53261	**PAR**	21/11/2025 9:45	CSI sampling. Cartographer record.	Brian Harrisson
Polmear Stream, Ship Inn SX 08749 53417	**TRIBUTARY**	21/11/2025 10:28	CSI sampling. Cartographer record.	Simon Tagney

D. THIS MONTH IN PICTURES

1. The flow of the Bokiddick Stream has been slowed by the beaver dam near Helman Tor. Slowing the flow of rivers reduces flood risk downstream and boosts biodiversity.

2. The ladder allowing a crossing of the Carbis Stream has slipped. There seems to be no plans for the bridge carrying the public footpath to be reinstated.

3. The Par River near Minorca Lane.

4. For much of its length the course of the Par River is artificially straight, as is shown here near Luxulyan allotments. A more natural course would reduce river flow, alleviate the risk of flooding and enhance biodiversity.

5. The Bokiddick Stream at Gatty's Bridge. This stream is part of the Tor to Shore project.

Photo: Joan Farmer

6. The Par River near Par Beach. Even at low tide Total Dissolved Solids were 627 PPM.

Photo: Brian Harrisson

7. Polmear Stream: clear water but readings of 100 PPB for phosphates and 163 PPM Total Dissolved Solids.

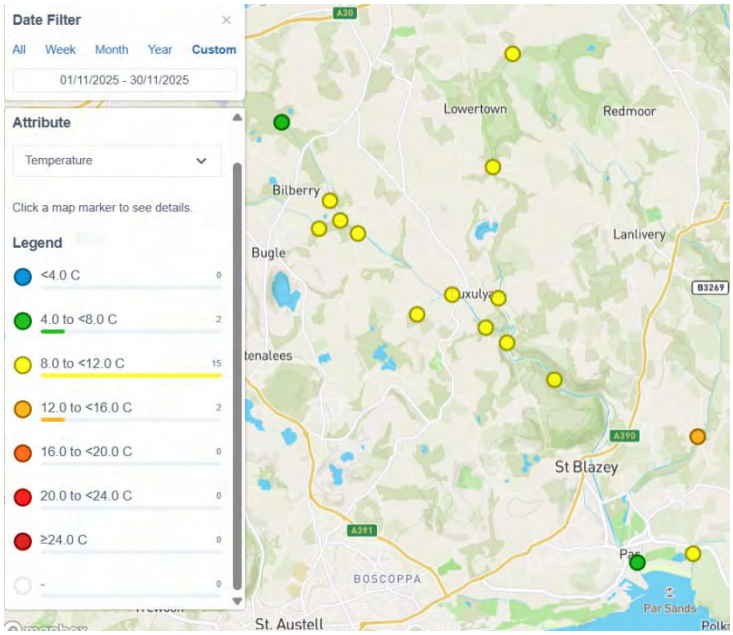
Photo: Simon Tagney

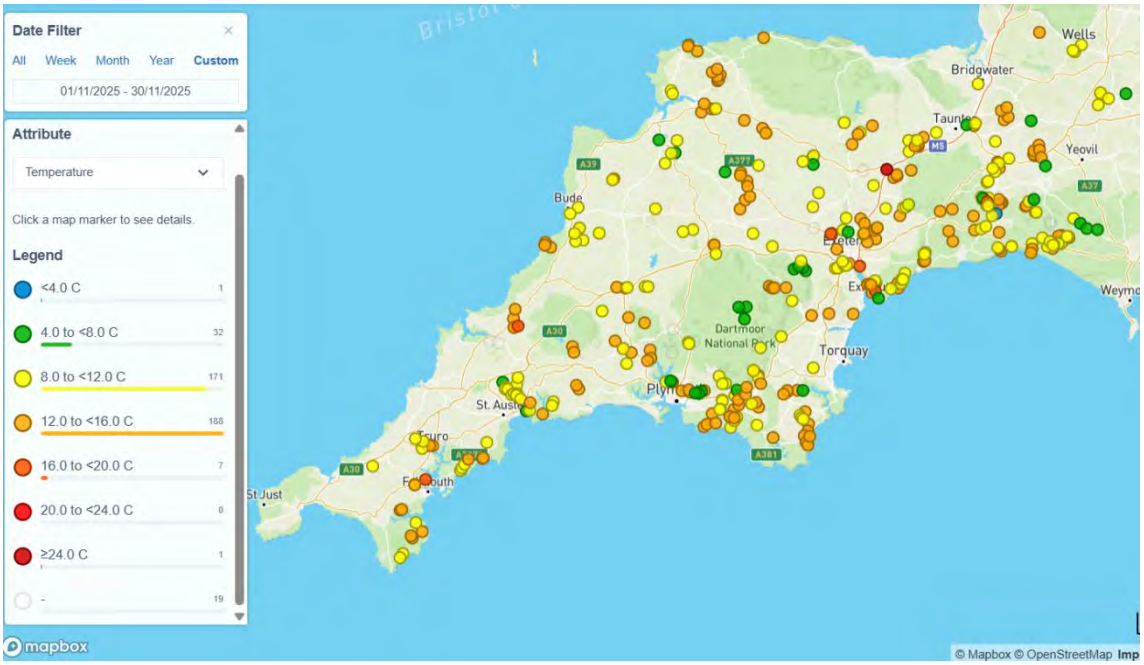
E. TEMPERATURE

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 November 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.

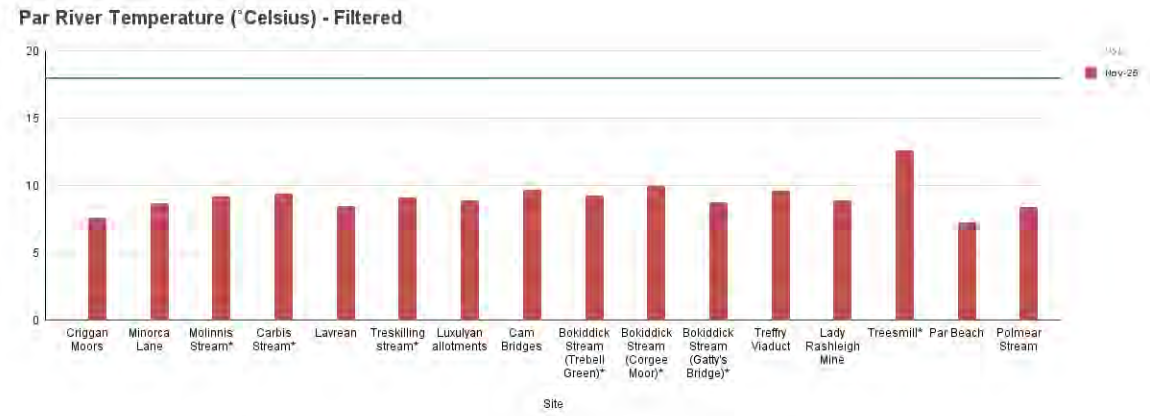
PAR RIVER/TRIBUTARY	LOCATION		Temperature ˚Celsius
Par	Criggan Moors, Par River, SX 01882 61133		**7.6**
Par	South of Minorca Lane, Par River, SX 02657 59788		**8.7**
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271		**9.2**
Tributary	Carbis Stream SX 02834 59401		**9.4**
Par	Lavrean, Par River SX 03134 59164		**8.5**
Tributary	Treskilling, Treskilling Stream, SX 04107 57726		**9.1**
Par	Luxulyan allotments, Par River, SX 04732 58045		**8.9**
Par	Cam Bridges, Par River, SX 05292 57454		**9.7**
Tributary	Trebell Green, Bokiddick Stream SX 0551960226		**9.3**
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167		**10**
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953		**8.8**
Par	Treffry Viaduct, Par River, SX 05650 57179		**9.6**
Par	Lady Rashleigh Mine, Par River, SX 06451 56509		**8.9**
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385		**12.6**
Par	Par Beach slipway, SX 0776 53261		**7.3**
Tributary	Polmear Stream, Ship Inn, SX 08749 53417		**8.4**

Colour coding:

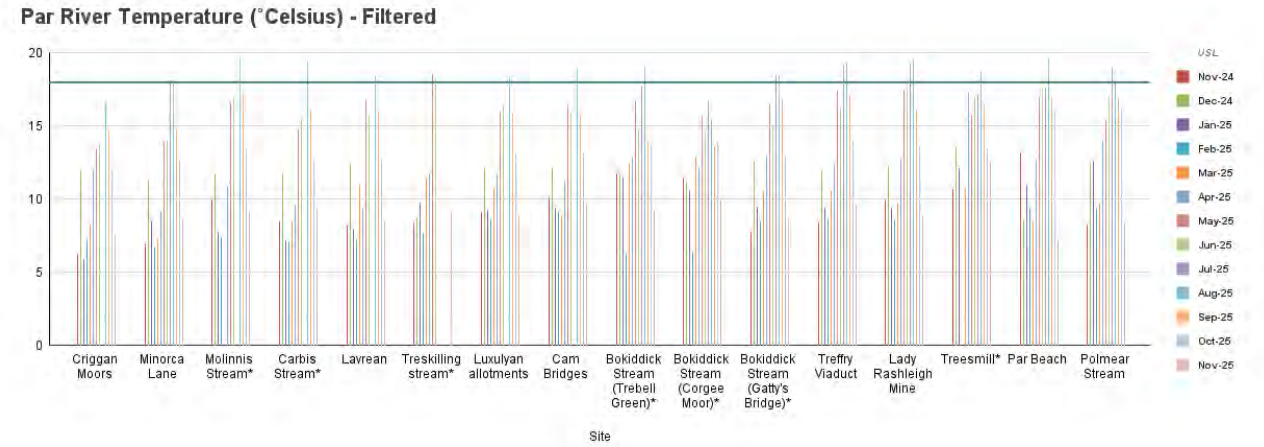
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

3. Graphs

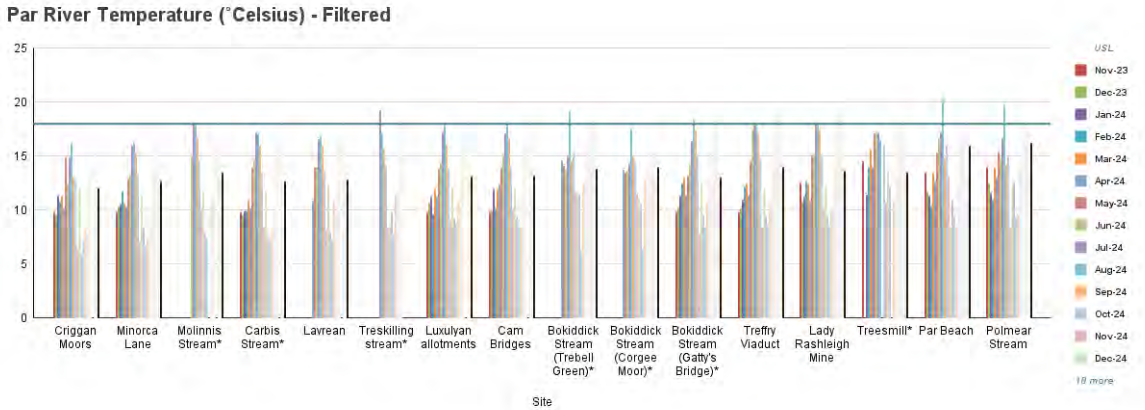
(a) This month:



(b) From 1st November 2024 until 30th November 2025:



(c) From 1st November 2023 until 30th November 2025:

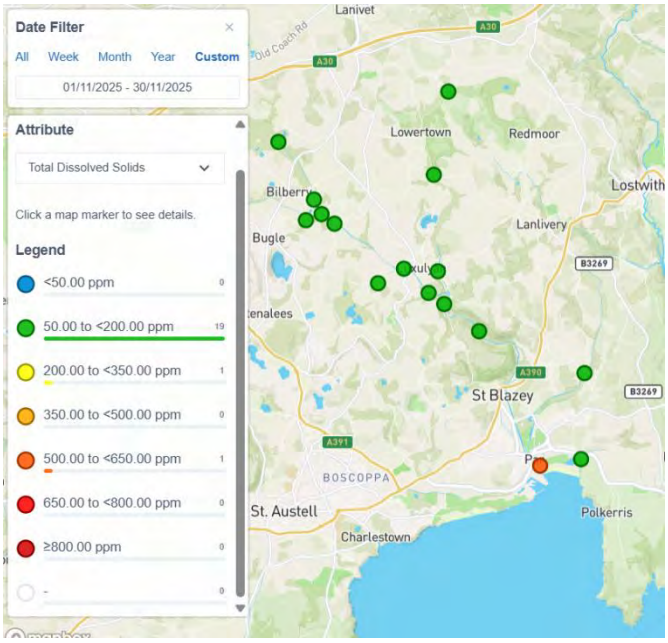


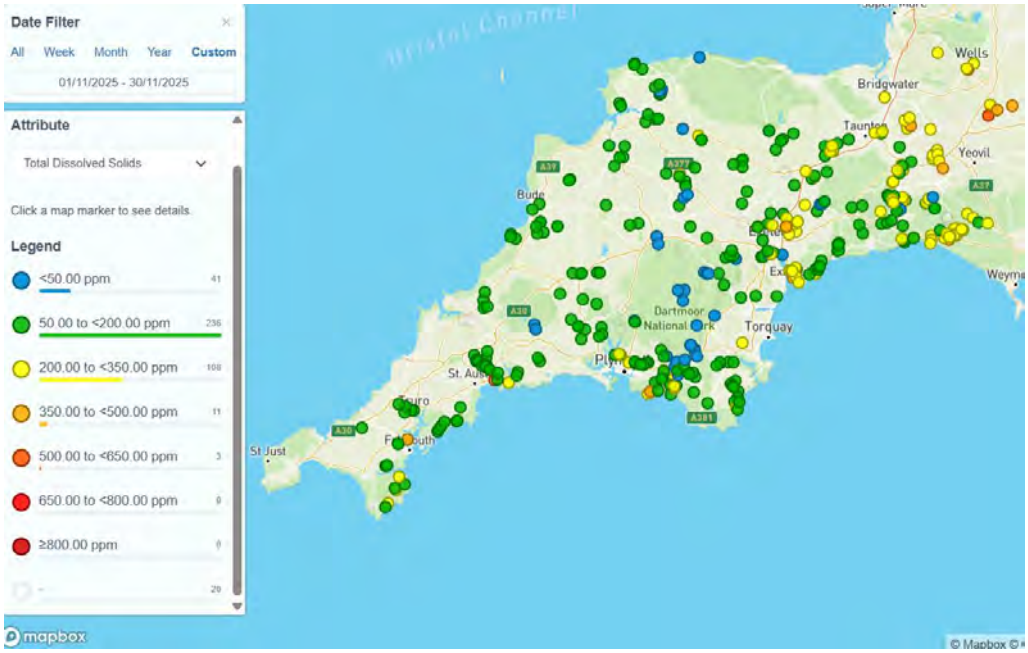
F. TOTAL DISSOLVED SOLIDS

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 TDS is 300 PPM. 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 November 2025

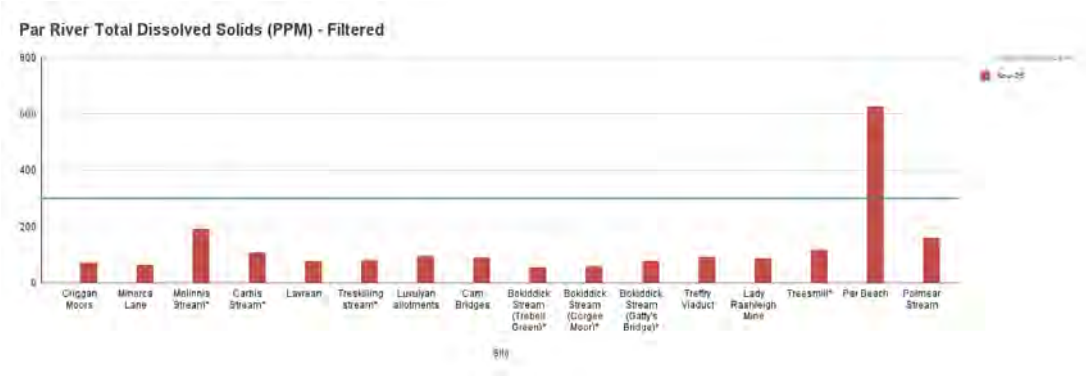
PAR RIVER/TRIBUTARY	LOCATION		Total Dissolved Solids PPM
Par	Criggan Moors, Par River, SX 01882 61133		**74**
Par	South of Minorca Lane, Par River, SX 02657 59788		**66**
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271		**194**
Tributary	Carbis Stream SX 02834 59401		**107**
Par	Lavrean, Par River SX 03134 59164		**79**
Tributary	Treskilling, Treskilling Stream, SX 04107 57726		**83**
Par	Luxulyan allotments, Par River, SX 04732 58045		**95**
Par	Cam Bridges, Par River, SX 05292 57454		**91**
Tributary	Trebell Green, Bokiddick Stream SX 0551960226		**57**
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167		**60**
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953		**78**
Par	Treffry Viaduct, Par River, SX 05650 57179		**94**
Par	Lady Rashleigh Mine, Par River, SX 06451 56509		**88**
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385		**119**
Par	Par Beach slipway, SX 0776 53261		**627**
Tributary	Polmear Stream, Ship Inn, SX 08749 53417		**163**

Colour coding:

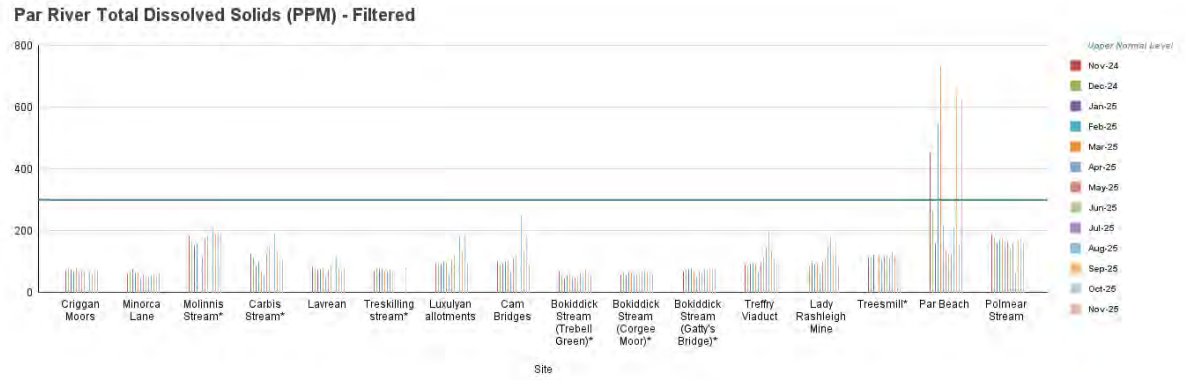
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

3. Graphs

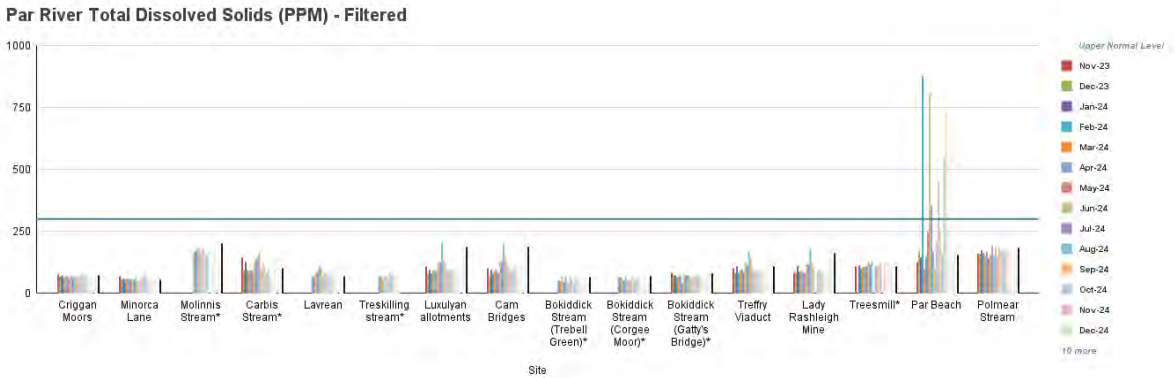
(a) This month:



(b) From 1st November 2024 until 30th November 2025:



(c) From 1st November 2023 until 30th November 2025:



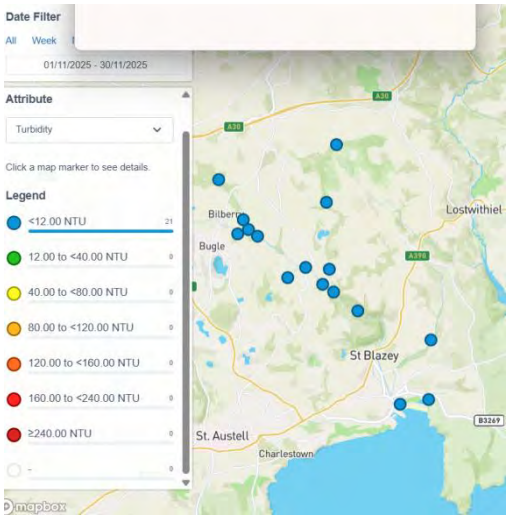
G. TURBIDITY

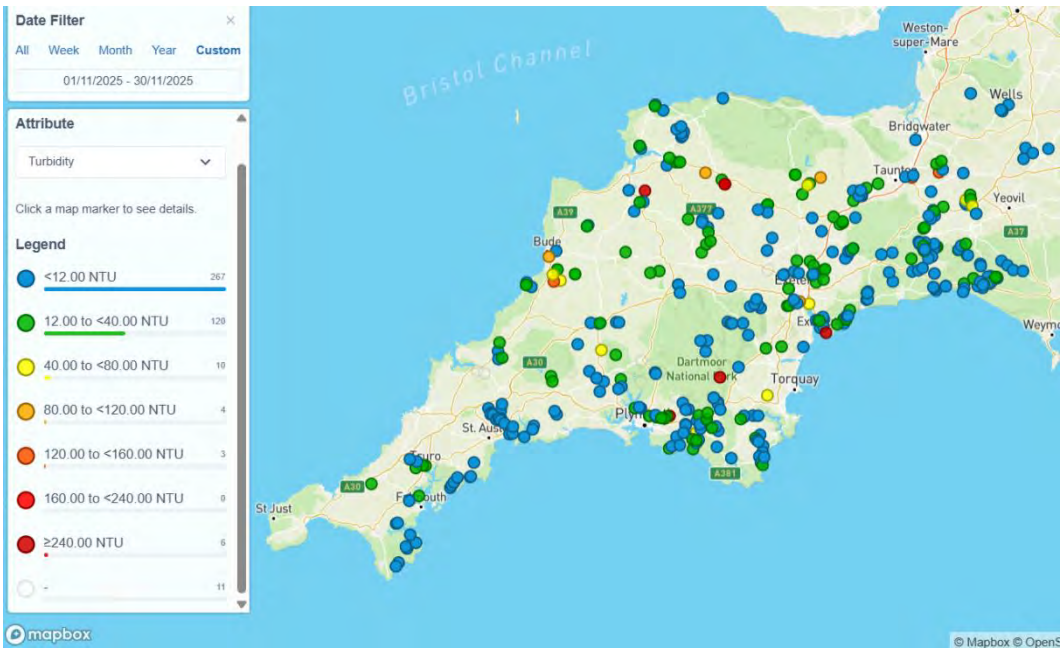
1. This is the WRT explanation of this measure:

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.





3. Results November 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.

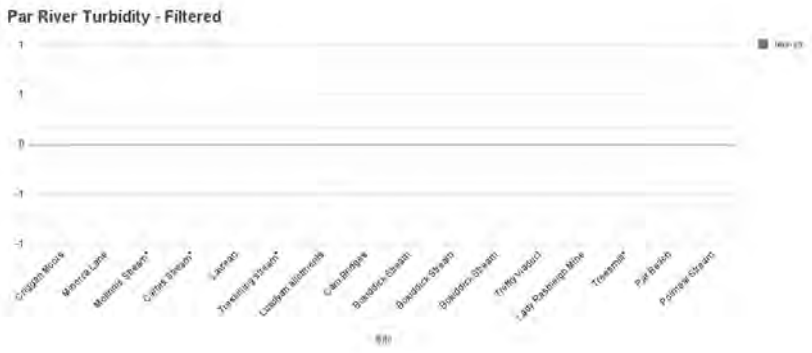
PAR RIVER/TRIBUTARY	LOCATION		Turbidity (NTU)
Par	Criggan Moors, Par River, SX 01882 61133		**<12**
Par	South of Minorca Lane, Par River, SX 02657 59788		**<12**
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271		**<12**
Tributary	Carbis Stream SX 02834 59401		**<12**
Par	Lavrean, Par River SX 03134 59164		**<12**
Tributary	Treskilling, Treskilling Stream, SX 04107 57726		**<12**
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		**<12**
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167		**<12**
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:

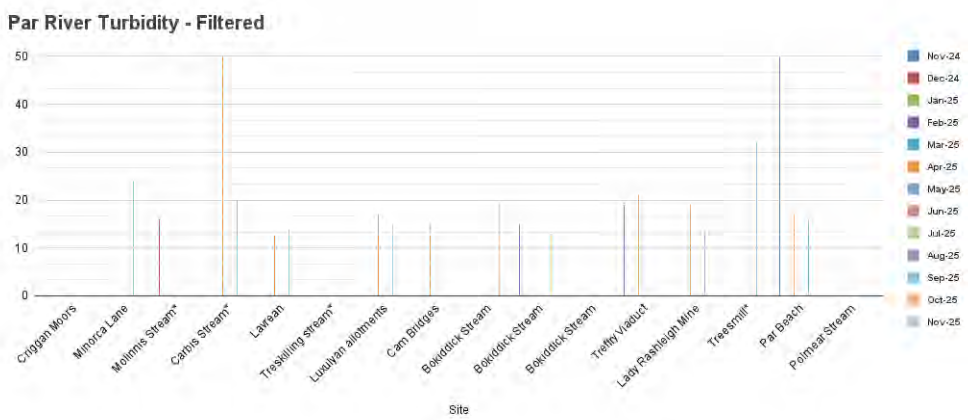
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

4. Graphs

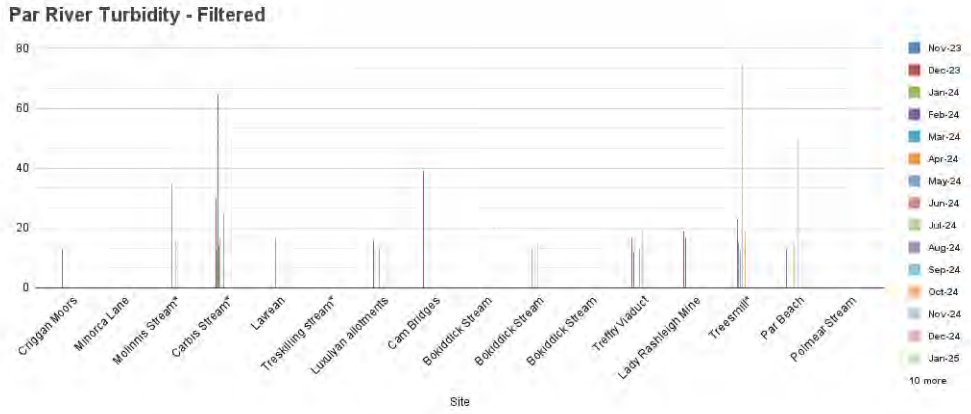
(a) This month:



(b) From 1st November 2024 until 30th November 2025:



(c) From 1st November 2023 until 30th November 2025:



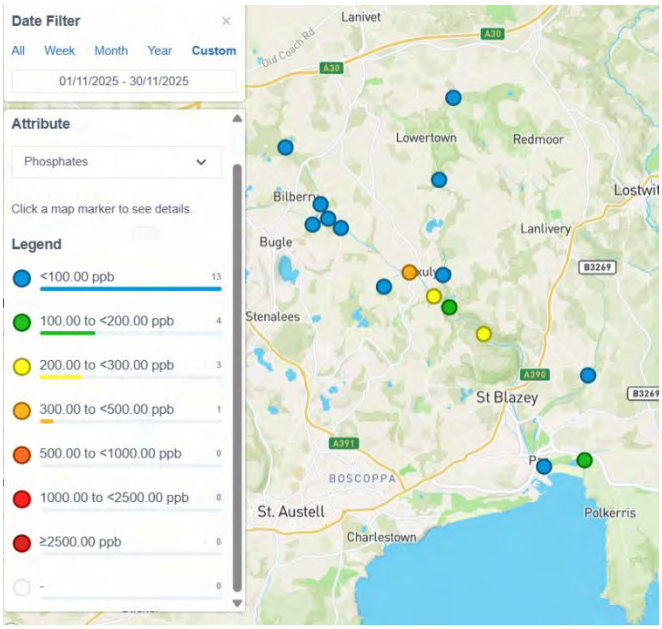
H. PHOSPHATES

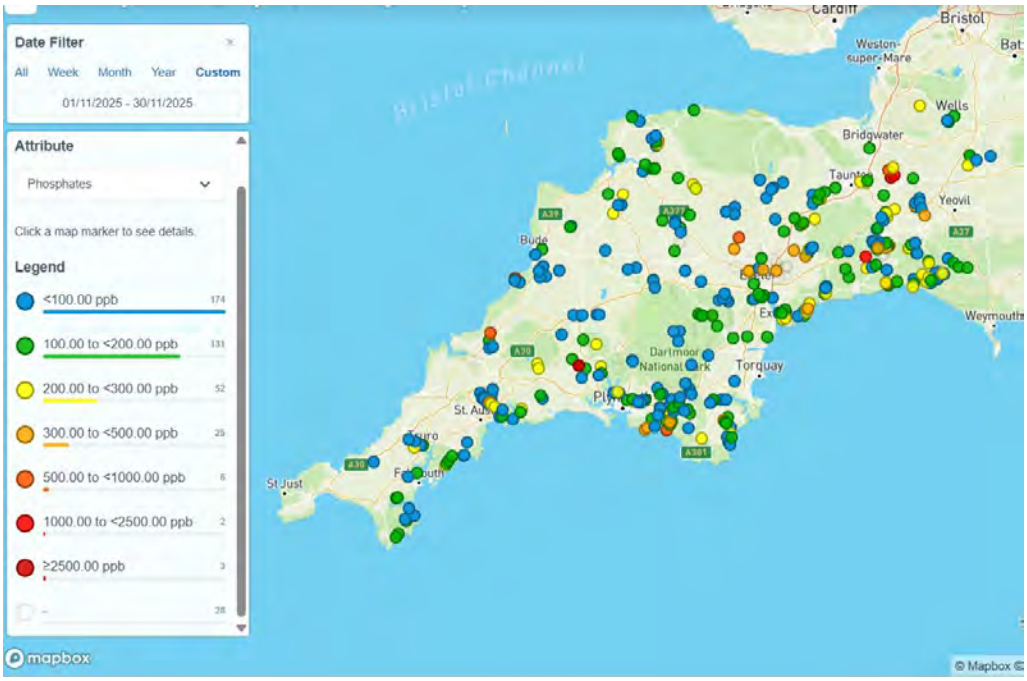
1. This is the WRT's explanation of this measure.

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 November 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).

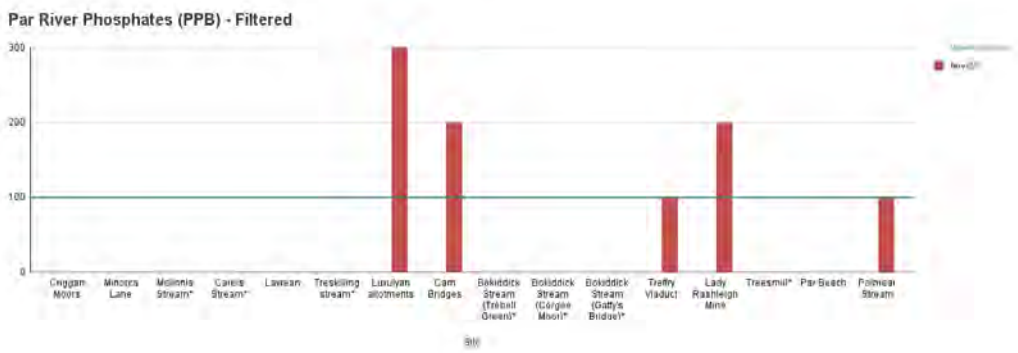
PAR RIVER/TRIBUTARY	LOCATION		Phosphates PPB
Par	Criggan Moors, Par River, SX 01882 61133		0
Par	South of Minorca Lane, Par River, SX 02657 59788		0
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271		0
Tributary	Carbis Stream SX 02834 59401		0
Par	Lavrean, Par River SX 03134 59164		0
Tributary	Treskilling, Treskilling Stream, SX 04107 57726		0
Par	Luxulyan allotments, Par River, SX 04732 58045		300
Par	Cam Bridges, Par River, SX 05292 57454		200
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		100
Par	Lady Rashleigh Mine, Par River, SX 06451 56509		200
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385		0
Par	Par Beach slipway, SX 0776 53261		0
Tributary	Polmear Stream, Ship Inn, SX 08749 53417		100

Colour coding:

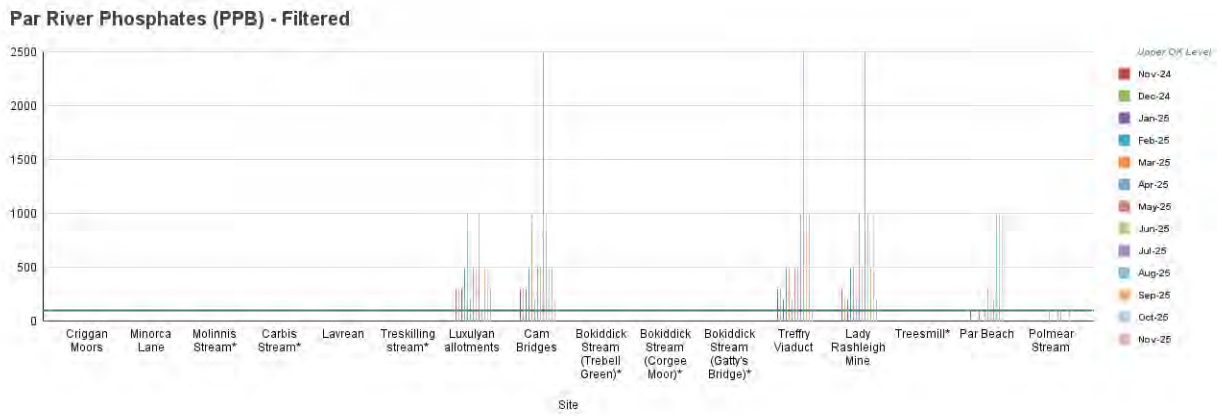
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

4. Graphs

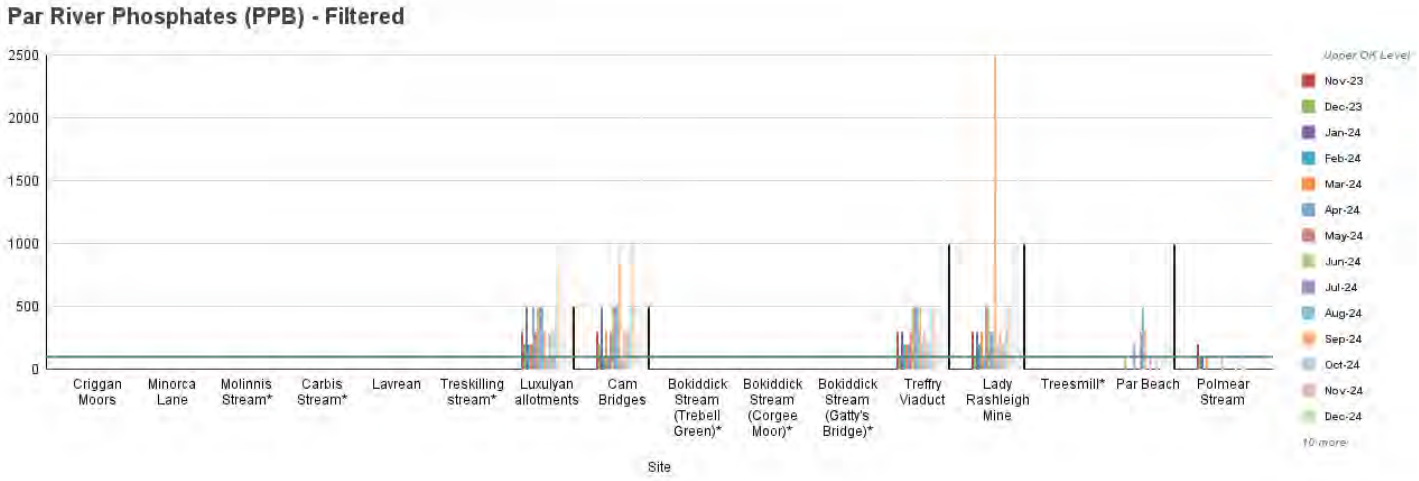
(a) This month:



(b) From 1st November 2024 until 30th November 2025:



(c) From 1st November 2023 until 30th November 2025:

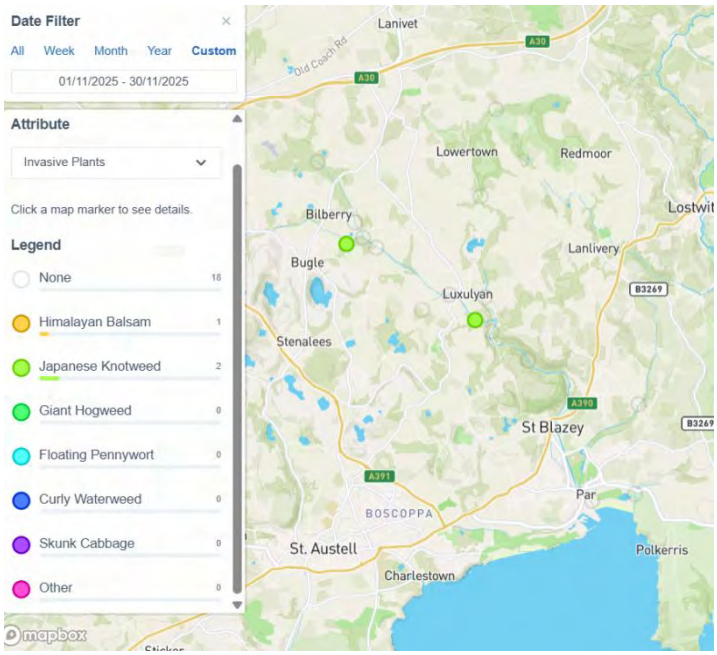


I. NITRATE

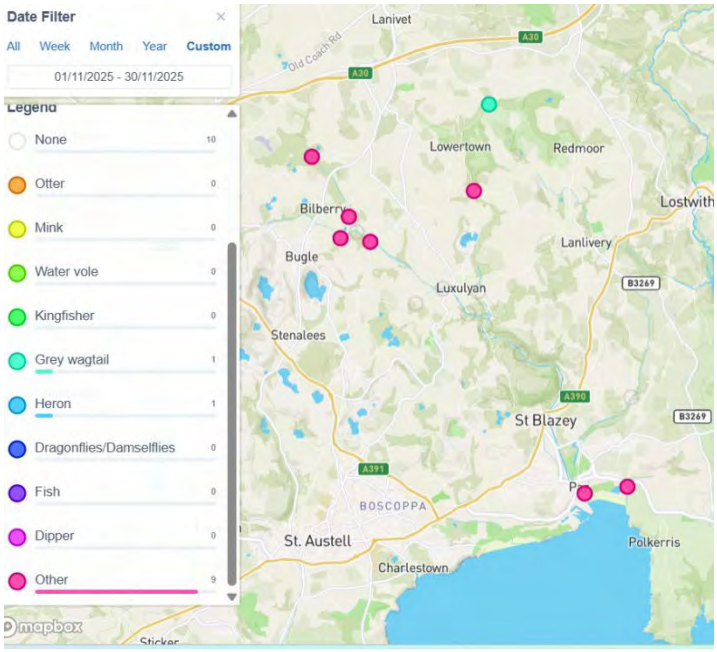
Nitrate testing began this month at all sites except Treesmill. Readings were all 0 PPM. Graphs will be generated once more results are available.

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, Wren, Robin.**		
South of Minorca Lane, Par River, SX 02657 59788	**HEARD: Robin.**		
Forkandles Farm, Molinnis Stream, SX 02460 59271	**HEARD: Carrion Crow.** **SEEN: Grey Squirrel, Robin.**		Japanese Knotweed (dead?)
Carbis Stream SX 02834 59401			
Lavrean, Par River SX 03134 59164	**HEARD: Chiffchaff.**		
Treskilling, Treskilling Stream, SX 04107 57726			
Luxulyan allotments, Par River, SX 04732 58045			
Cam Bridges, Par River, SX 05292 57454			Japanese Knotweed
Trebell Green, Bokiddick Stream SX 0551960226	**HEARD: Robin, Goldcrest, Redwing.**		
Corgee Moor, Bokiddick Stream SX 0593462167	**HEARD: Redwing.**		
Gatty's Bridge, Bokiddick Stream SX 05531 57953			
Treffry Viaduct, Par River, SX 05650 57179			
Lady Rashleigh Mine, Par River, SX 06451 56509			
Treesmill, Tywardreath Stream, SX 08873 55385			
Par Beach slipway, SX 0776 53261	**SEEN: Ducks.**		
Polmear Stream, Ship Inn, SX 08749 53417	**Robin.**		

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

Colour coding:

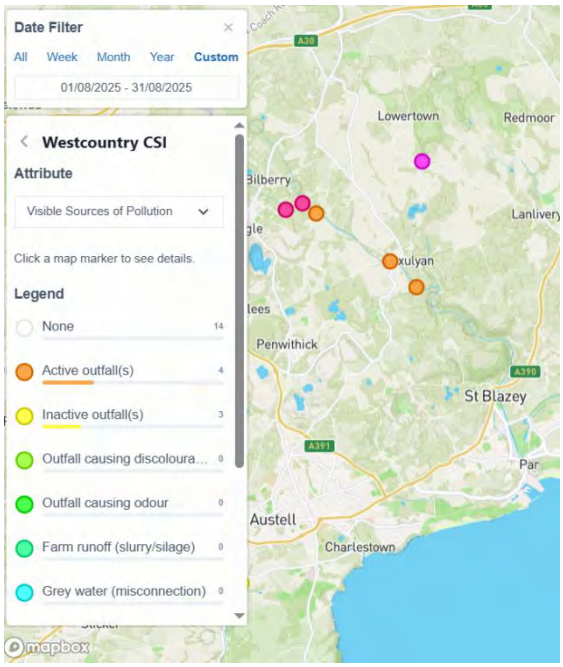
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

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

These will resume next Spring.

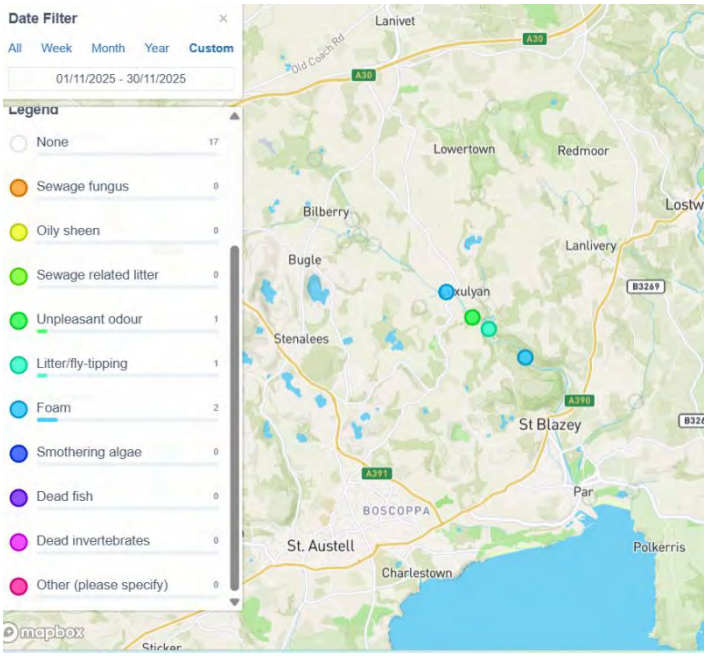
L. POLLUTION SOURCES AND EVIDENCE

1. Visible sources of pollution (source: Cartographer)



2. Evidence of recent pollution:

This relates to pollution that is visible; filtered sewage was spilled into the Molinnis and Carbis Streams, and the Par River (see section 3 below), but this is not shown on the map.



LOCATION		EVIDENCE OF RECENT POLLUTION
Criggan Moors, SX 01882 61133		
South of Minorca Lane, Par River, SX 02657 59788		
Forkandles Farm, Molinnis Stream, SX 02460 59271		
Carbis Stream SX 02834 59401		
Lavrean, Par River SX 03134 59164		Foam
Treskilling, Treskilling Stream, SX 04107 57726		
Luxulyan allotments, Par River, SX 04732 58045		Foam, phosphate, filtered sewage (?)
Cam Bridges, Par River, SX 05292 57454		Foam, smell (?), phosphate, filtered sewage (?)
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		Litter, phosphate, filtered sewage (?)
Lady Rashleigh Mine, Par River, SX 06451 56509		Foam, phosphate, filtered sewage (?)
Treesmill, Tywardreath Stream, SX 08873 55385		None
Par Beach slipway, SX 0776 53261		Phosphate, filtered sewage (?)
Polmear Stream, Ship Inn, SX 08749 53417		Phosphate

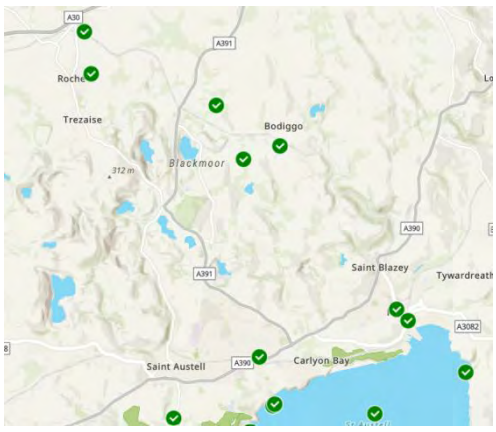
N.B. Although not noticeable at our monitoring points, there is a persistent smell of sewage in the vicinity of the Molinnis CSO even when there have been no reported discharges.

Colour coding:

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

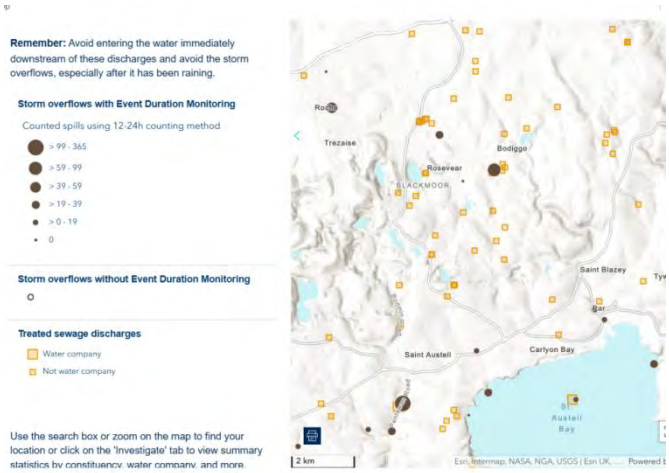
3. South West Water Storm Overflows

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)

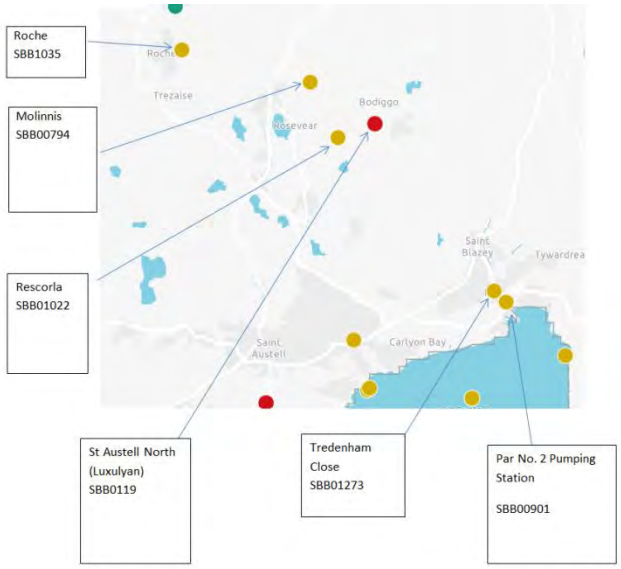


(b) South West Water Storm Overflows in the Par River Catchment (updated December 2025):

The main overflows are (from source to sea along the catchment). The identification numbers have been updated:

Roche storm overflow (SBB01035)
Molinnis storm overflow, Bugle (SBB00794)
Rescorla storm overflow, Luxulyan (SBB01022)
Luxulyan sewage treatment works settled storm overflow, St Austell (SBB0119)
Tredenham Close storm overflow, Par (SBB1273)
Par No2 pumping station overflow, Par (SBB01273)

(c) SWW Storm Overflow spills October 2025 This information has been taken from the *Surfers Against Sewage* discharge website: https://datahq.sas.org.uk/sewage-data-hq/ and The Rivers Trust's site: https://theriverstrust.org/sewage-map .



DATE	LOCATION ID OF SOUTH WEST WATER FACILITY					
	ROCHE CSO SBB1035 Discharges into Par River St Austell & Newquay constituency	**MOLINNIS CSO SBB00794 Discharges into tributary of Par River (Molinnis Stream) St Austell & Newquay constituency**	**RESCORLA CSO SBB01022 Discharges into tributary of Par River S.E. Cornwall constituency**	**ST AUSTELL NORTH (LUXULYAN) SBB01119 Par River S.E. Cornwall constituency**	**TREDENHAM CLOSE CSO SBB01273 Discharges into St Blazey Stream St Austell & Newquay constituency**	**PAR No. 2 Pumping Station SBB00901 Discharges into Par River St Austell & Newquay constituency**
1/11/2025						
2/11/2025						
3/11/2025			9:33 maintenance begins			
4/11/2025	9:34-9:40 = 6 mins 11:42-11:44 = 2 mins 23:56-23:58 = 2 mins	11:32-12:00 = 28 minutes 17:32-1738 = 6 minutes	8:14 maintenance ends	16:02 discharge starts		
5/11/2025		15:26-15:28 = 2 mins		15:58 discharge ends = 23 h 56 mins		
6/11/2025						
7/11/2025	12:00-12:21 = 21 mins	12:04-13:08 = I h 4 mins		12:07-20:55 = 8h 48 mins		
8/11/2025						
9/11/2025	11:41-11:46 = 5 mins	2:22-2:28 = 6 mins 11:54-12:08 = 14 mins 12:10-12:24 = 14 mins 15:04-15:06 = 2 mins 15:22-15:24 = 2 mins		12:06 discharge starts		
10/11/2025				00:27 discharge ends = 12 h 21 mins 9:15-16:38 = 7 hours 23 mins		
11/11/2025				18:09 discharge		

				starts		
12/11/2025	4:52-4:56 = 4 mins 21:53-21:57 = 4 mins	4:18-5:22 = 1 h 4 mins		Discharging		
13/11/2025	18:56 -18:59 = 3 mins 19:27 -1932 = 5 mins 20:36-20:39 = 3 mins 20:48-20:50 = 2 mins	19:16-20:22 = 1 hour 6 mins	14:31 maintenance begins	11:52 discharge ends = 41 hours 43 mins 18:38 discharge starts		
14/11/2025	11:45-12:04 = 19 mins 12:17-12:47 = 30 mins 12:57-13:00 = 3 mins 14:02-14:03 = 1 min	11:54 no more information 12:44-13:20 = 36 mins 13:58-14:20 = 22 mins 15:24-15:26 = 2 mins 20:04-20:06 = 2 mins	Maintenance 12:35-12:12:50 = 15 mins	Discharging		
15/11/2025		6:54-6:56 = 2 mins 14:04-14:06 = 2 mins	Maintenance	21:30 discharge ends = 50 hours and 51 minutes		
16/11/2025			Maintenance			
17/11/2025			Maintenance			
18/11/2025		9:10-9:12 = 2 mins	13:21 maintenance ends = 4 days 22 hours 50 mins			
19/11/2025						
20/11/2025				3:19-5:03 = 1 h 44 mins 8:43-10:59 = 2 h 16 mins		
21/11/2025			8:50 maintenance begins			
22/11/2025	8:51-8:53 = 2 mins	9:26-9:44 = 18 mins	Maintenance	7:08-23:04 = 15 h 56 mins		
23/11/2025	2:24-2:25 = 1 min 3:11-3:26 = 15 mins	3:18-4:00 = 42 mins	Maintenance	00:58 discharge starts		
24/11/2025	7:22-7:23 = 1 min 11:44-11:46 = 2 mins	7:26-7:30 = 4 mins	Maintenance	Discharging		
25/11/2025			Maintenance	Discharging		
26/11/2025			9:21 maintenance ends = 5 days 31 mins	3:49 discharge ends = 74 hours 51 mins 17:46-		
27/11/2025				Discharging		
28/11/2025				03:28 discharge ends = 33 hours 41 mins [Calculated from The Rivers Trust website]		
29/11/2025	2:02 no more information 2:23-2:45 = 22 mins	2:38-3:16 = 38 mins		2:11 discharge starts		
30/11/2025				6:52 discharge ends = 28 hours 40 mins 21:47 discharge starts		
TOTAL SPILLAGE TIME (HOURS) for November 2025	**2 hours 33 minutes**	**7 hours 14 minutes**	**15 minutes**	**(Including 2h 13 minutes from the most recent discharge) = 304 hours 23 minutes**	**None**	**None**

(iii) For information about sewage spills in each parliamentary constituency, go to: https://top-of-the-poops.org/constituency/south-east-cornwall.

These are the 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**

As mentioned above, Anna Gelderd, M.P. for South-East Cornwall has shown concern about pollution from SWW facilities; Noah Law M.P. and Councillor Sarah Preece share these concerns. The spills from SWW this month were so concerning that a message was sent to Anna asking if she could take the matter up on behalf of her constituents. The same concerns were sent to local Environment Agency officials who have always been very helpful to those of us carrying out citizen science. The following points were made in this email:

> *1. Why is SWW discharging from its facilities (including St Austell North but others as well) so frequently? Is it due to a lack of capacity? Tankers are often seen coming to and from St Austell North and there is a belief locally that sewage is having to be taken to other treatment works (such as Nanstallon) for treatment because it cannot be treated here.*
>
> *2. Is this due to a lack of investment to expand storage and treatment capacity? No doubt SWW would point out incidents of heavy rainfall as an explanation but these events are consistent with climate change, something which a responsible utility company should be addressing in its plans for its current and future operation. It is unacceptable that dividends and bonuses should be paid when such a poor level of service is provided. A principle of the 'the polluter pays' should apply, not 'the polluter is paid'.*
>
> *3. Are the frequent, extended discharges in any way due to the addition of the West Carclaze Garden Village, and associated developments, to the local sewerage system? If so, why wasn't extra capacity added when the scheme was approved?*
>
> *4. I believe discharges are screened to remove visible sewage detritus but what is the chemical composition of what is spilled? Does SWW test discharges for E.coli, Total Coliforms or other bacteria? Surely the company must know what it is allowing to be spilled?*
>
> *5. What are the intentions of SWW in the short and long term for ceasing to spill sewage in our rivers? There is a deadline of 2030 for the removal of phosphate from treated effluent discharges, and I hope that planning for this has begun, but the phasing out of CSOs is also vital and ought to have started, given public concern.*

The responses received were very encouraging. The EA referred the specific issue of St Austell North STW at Luxulyan to their Water Industry team for further, site-specific investigation.

Anna Gelderd tackled South West Water at a corporate level. In her very helpful response, she outlined what she has done and her intentions for further action, including:

> She told the House of Commons that South-East Cornwall 'recorded the 14th highest hours of sewage dumping in the country last year'.
> She had 'challenged the outgoing CEO of South West Water during a public committee hearing, demanding answers on sewage pollution and the lack of transparency'.
> She had 'pressed the parent company, Pennon Group, on the growing number of complaints I'm receiving, from spills, bills and infrastructure failures, to their continued use of biobeads [see above, page 4]'.
> Anna noted that the Water (Special Measures) Act 2025 would bring in criminal penalties for deliberate polluters, with a 2030 target to halve discharges. It would replace Ofwat with a more robust regulator.
> She 'met with the Minister for Water, Emma Hardy, who confirmed key reforms to bathing water standards that will directly benefit our local beaches'.
> In 2026 she will meet Keith Haslett, the incoming CEO of South West Water to voice her concerns.
> With regard to the points made about St Austell North STW, she will raise them next year with David Sproul, Pennon's Chair, who will lead the Group as Executive Chair from January 2026. The current CEO would be leaving at the end of December, so it seemed wiser to wait until her successor was in place.

Clearly she would like more to be done and faster but is definitely committed to making our rivers and coastal waters 'safe, clean and protected for future generations'.

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, 24th December 2025