

# MONITORING OF THE PAR RIVER AND ITS TRIBUTARIES

The monitoring group operates under the citizen science scheme run by the Westcountry Rivers Trust. Comments and opinions in this report are those of the authors only.

## JANUARY 2025



The headwaters of the Bokiddick Stream, with Helman Tor in the background.

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

### 1. Data

We sampled at 16 locations between 14<sup>th</sup> and 22nd January 2025. The **red** highlighting shows results of concern.

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 (CARBIS STREAM, MOLINNIS STREAM, TRESKILLING STREAM, BOKIDDICK STREAM) 6 TESTING LOCATIONS	TRIBUTARY OF LOWER PAR (POLMEAR STREAM) 2 TESTING LOCATION
TEMPERATURE ° CELSIUS (SHOULD NOT EXCEED 18° CELSIUS)	Mean 8.22 Median 8.5 Min 5.9 Max 9.4	Mean 10.06 Median 9.4 Min 9.4 Max 11.4	Mean 9.4 Median 9.65 Min 7.2 Max 11.5	Mean 12.35 Median 12.35 Min 12.1 Max 12.6
TOTAL DISSOLVED SOLIDS PPM (SHOULD NOT EXCEED 300 PPM)	Mean 78.6 Median 76 Min 59 Max 94	Mean 116.33 Median 96 Min 93 Max 160	Mean 82.5 Median 77.5 Min 46 Max 154	Mean 142 Median 142 Min 123 Max 161
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 <b>120</b> Median 0 Min 0 Max <b>300</b>	Mean <b>133.33</b> Median 200 Min 0 Max <b>200</b>	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 SPRING 2025			
WILDLIFE EVIDENCE	Blue Tit, Great Tit Song Thrush, Robin, Dunnock, Chaffinch, Treecreeper, Wren. Recent otter spraint.	Recent otter spraint. Dipper, pigeons, gulls.	Redwing, Blue Tit, Great Tit, Robin, Goldfinch, Blackbird. Beaver lake.	Robin
INVASIVE PLANTS	None	None	None	None
EVIDENCE OF POLLUTION	Foam, smell	Foam	Slight grey tinge (china clay), litter.	None

## **2. Key points**

### **(a) Positive signs**

(i) Otter spraint was found on the main river near Lady Rashleigh Mine and, for the first time, near Lavrean.

(ii) The action of beavers on the Upper Bokiddick is slowing the flow of the stream and creating a more natural riverine habitat.

(iii) Cornwall Wildlife Trust's Tor to Shore project, which will focus on vital habitat improvement along the Bokiddick stream and Lower Par River, thereby connecting land to sea, is creating a lot of positive interest and support. More information can be found at:

<https://www.cornwallwildlifetrust.org.uk/tor-to-shore> .

### **(b) Points of concern**

(i) High phosphate levels. One significant identified source is the SWW St Austell North STW at Luxulyan.

(ii) Discharges from the SWW storm overflows occurred during a period of wet weather, with one overflow, at the St Austell North STW at Luxulyan, discharging from 10:10 on 26<sup>th</sup> January to 12:57 on 29<sup>th</sup> January 2025.

(iii) Although readings for Total Dissolved Solids have not approached the figure of 300 parts per million (PPM) that we have been told is unacceptably high, the relatively high scores at some points is concerning, e.g. on the Molinnis Stream, Par Beach slipway on the Lower Par, and on the Treemill and Polmear streams.

### **(c) Areas for further research**

(i) It would be interesting to know what progress SWW is making in reducing ammonia and phosphate pollution from the St Austell North STW at Luxulyan and what, if anything, the company is doing to reduce spillages from the storm overflows.

(ii) The sources of the relatively high TDS readings at certain locations need to be determined.

(iii) Discolouration of the water from china clay on the Molinnis and Carbis Streams was evident. This is not always so and may be caused by active discharges, erosion of streambanks, or both.



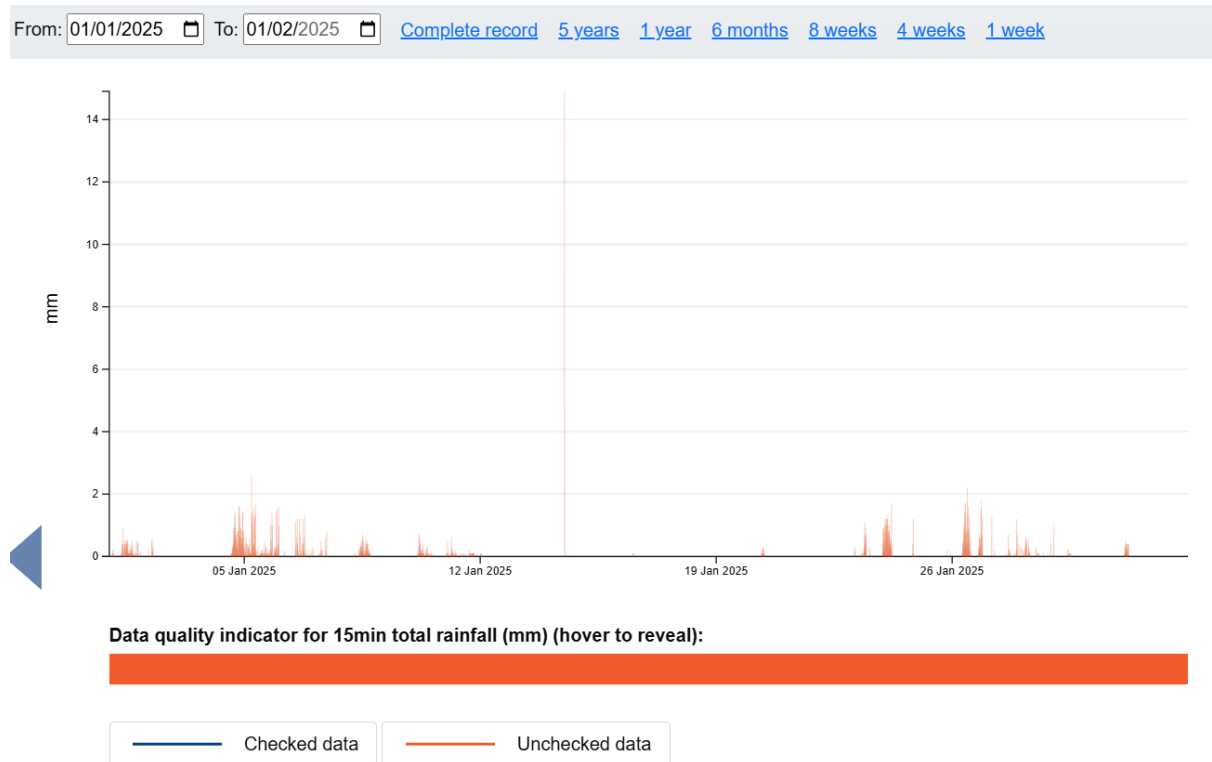


The valley of the Lower Par is part of the Tor to Shore project area.



## B. RAINFALL, RIVER LEVELS AND FLOW

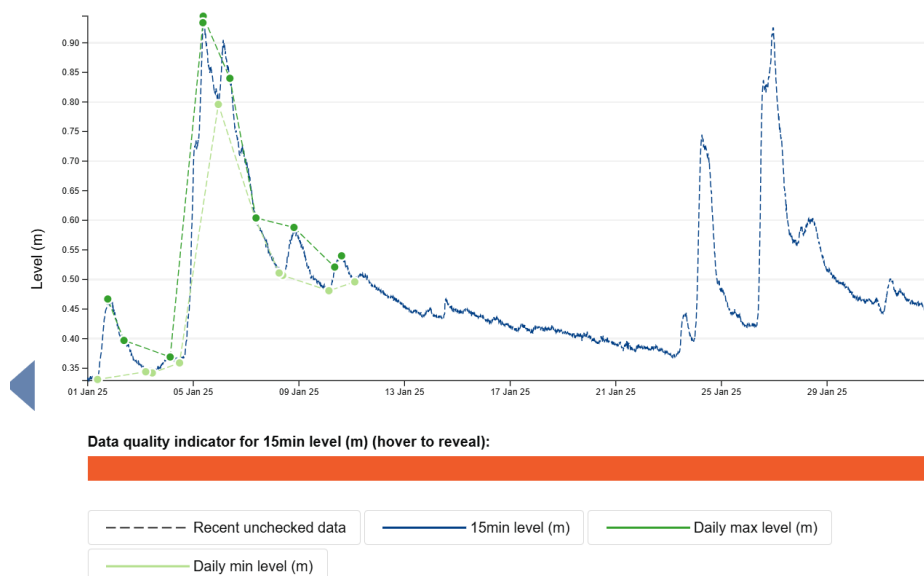
### 1. Rainfall at Luxulyan ([https://environment.data.gov.uk/hydrology/station/14aadf3c-3d4d-44b3-b26b-cf705827d00e\\_377323](https://environment.data.gov.uk/hydrology/station/14aadf3c-3d4d-44b3-b26b-cf705827d00e_377323))



### 2. Par River levels at Luxulyan preceding and during surveys. Source:

<https://environment.data.gov.uk/hydrology/station/14aadf3c-3d4d-44b3-b26b-cf705827d00e>

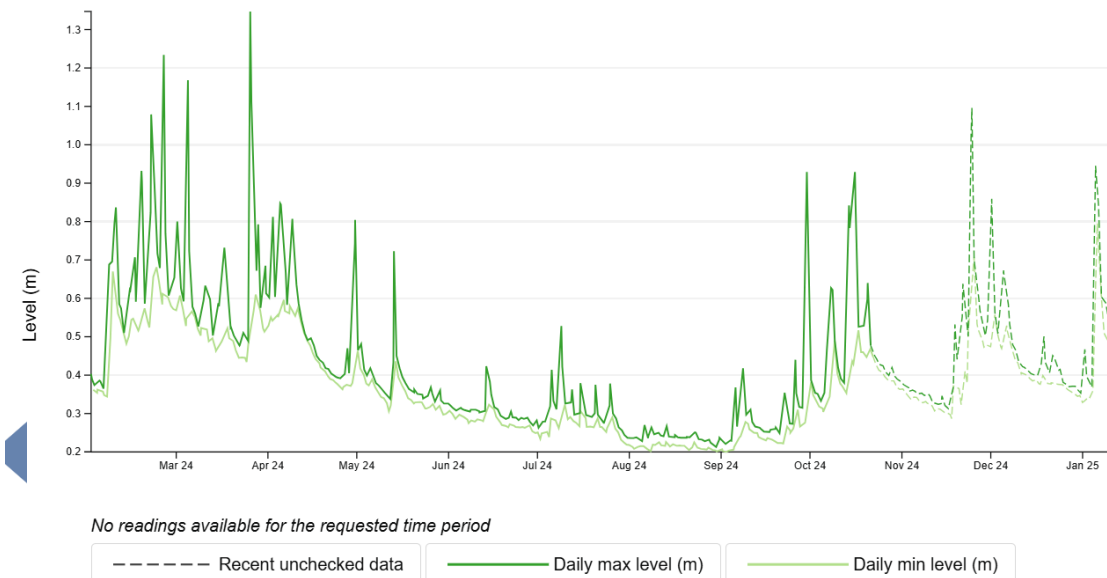
#### (a) Levels



**(b) Maximum and minimum levels at Luxulyan for the last year:**

**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.

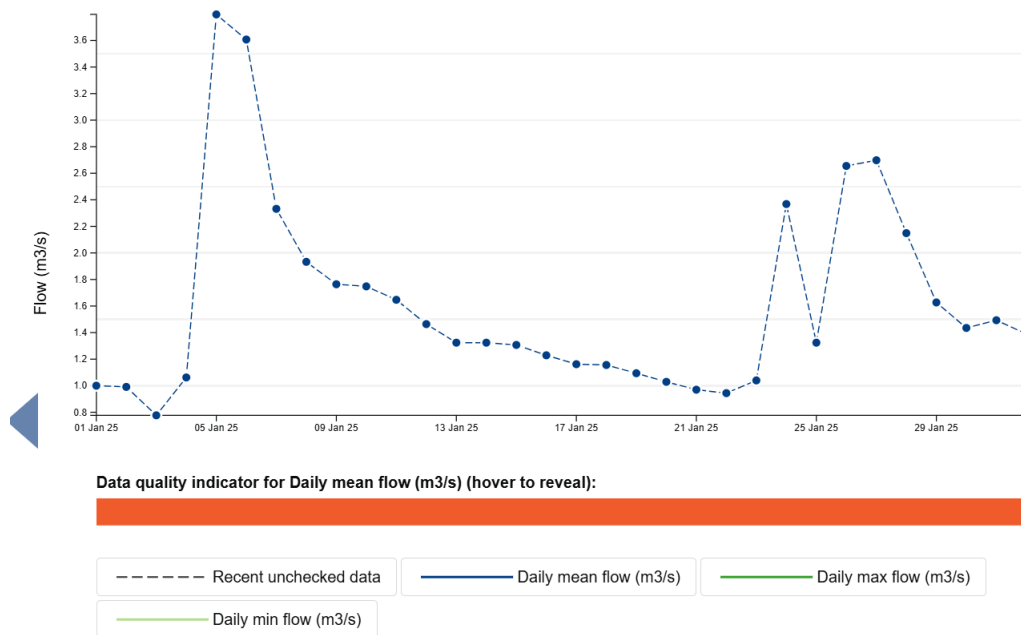


**(c) How levels at Luxulyan could affect nearby areas:**

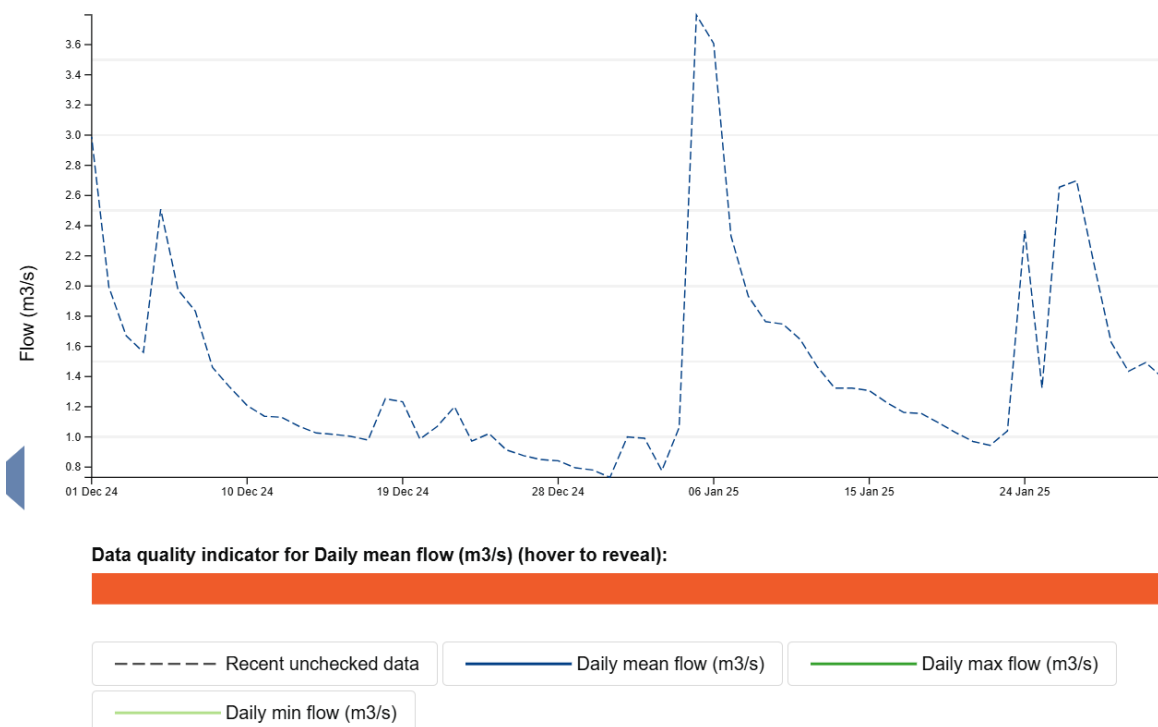
<b>1.80m</b>	Property flooding is possible above this level. One or more flood warnings may be issued
<b>1.68m</b>	Water reaches the highest level recorded at this measuring station (recorded on 19 December 1999)
<b>1.40m</b>	Low lying land flooding is possible above this level. One or more flood alerts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

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

#### (a) The last month (N.B. Some data unchecked):



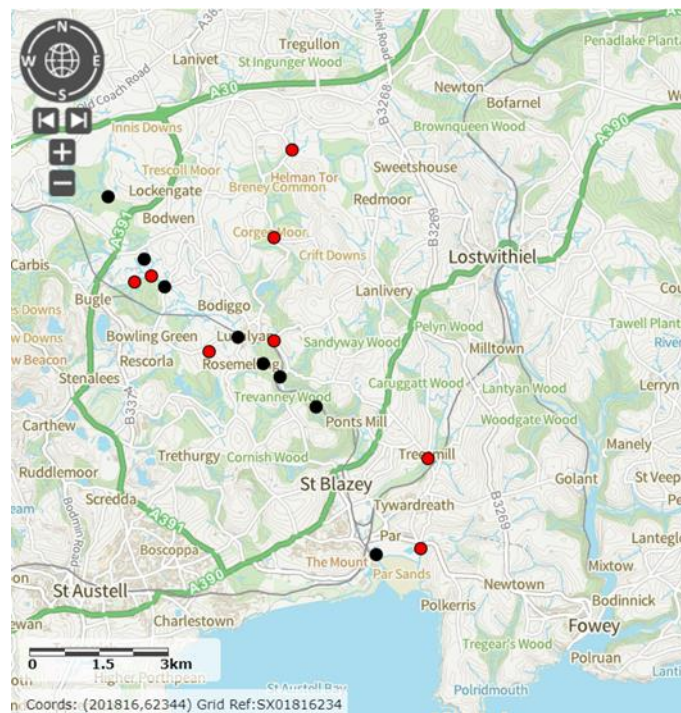
#### (b) The last year N.B. More recent data is unchecked):



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: Pontois 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, Pontois 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. JANUARY 2025 MONITORING POINTS

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>





LOCATION	PAR/TRIBUTARY	DATE/TIME	TYPE OF CHECK	MONITORED BY
Criggan Moors, Par River, SX 01882 61133	PAR	15/1/2025 9:00	CSI sample & Cartographer record.	Roger Smith
South of Minorca Lane, Par River, SX02668 59747	PAR	15/1/2025 8:10	CSI sampling. Cartographer record.	Roger Smith
Near Forkandles farm, Molinnis Stream, SX 02460 59271	SECONDARY TRIBUTARY (OF CARBIS STREAM)	15/1/2025 10:05	CSI sample & Cartographer record.	Roger Smith
Carbis Stream SX 02834 59401	TRIBUTARY	15/1/2025 9:50	CSI sampling. Cartographer record.	Roger Smith
Lavrean, Par River SX 03134 59164	PAR	15/1/2025 10:30	CSI sampling. Cartographer record.	Roger Smith
Treskill, Treskill Stream, SX 04107 57726	TRIBUTARY	22/1/2025 15:45	CSI sampling. Cartographer record.	Roger Smith
Luxulyan allotments, Par River, SX 04732 58045	PAR	15/1/2025 11:25	CSI sampling. Cartographer record.	Roger Smith
Cam Bridges, Par River, SX 05292 57454	PAR	15/1/2025 13:25	CSI sampling. Cartographer record.	Roger Smith
Trebell Green, Bokiddick Stream SX 0551960226	TRIBUTARY	14/1/2025 14:05	CSI sampling. Cartographer record.	Roger Smith
Corgee Moor, Bokiddick Stream SX 0593462167	TRIBUTARY	14/1/2025 15:00	CSI sampling. Cartographer record.	Roger Smith
Gatty's Bridge, Bokiddick Stream SX 05531 57953	TRIBUTARY	15/1/2025 13:20	CSI sampling. Cartographer record.	Joan Farmer
Treffry Viaduct, Par River, SX 05650 57179	PAR	15/1/2025 15:40	CSI sampling. Cartographer record.	Joan Farmer
Lady Rashleigh Mine, Par River, SX 06451 56509	PAR	15/1/2025 14:00	CSI sampling. Cartographer record.	Veronica Jones
Treesmill, Tywardreath Stream, SX 08873 55385	TRIBUTARY	15/1/2025 13:30	CSI sampling. Cartographer record.	Maggie Tagney
Par Beach slipway, SX 0776 53261	PAR	14/1/2025 14:50	CSI sampling. Cartographer record.	Brian Harrison
Polmear Stream, Ship Inn SX 08749 53417	TRIBUTARY	14/1/2025 15:20	CSI sampling. Cartographer record.	Simon Tagney

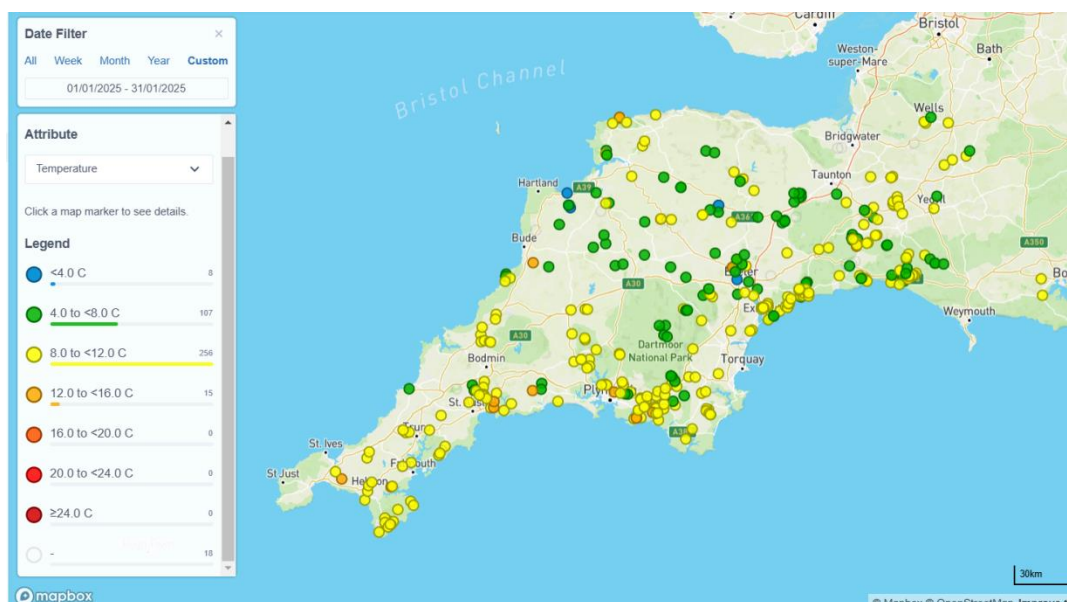
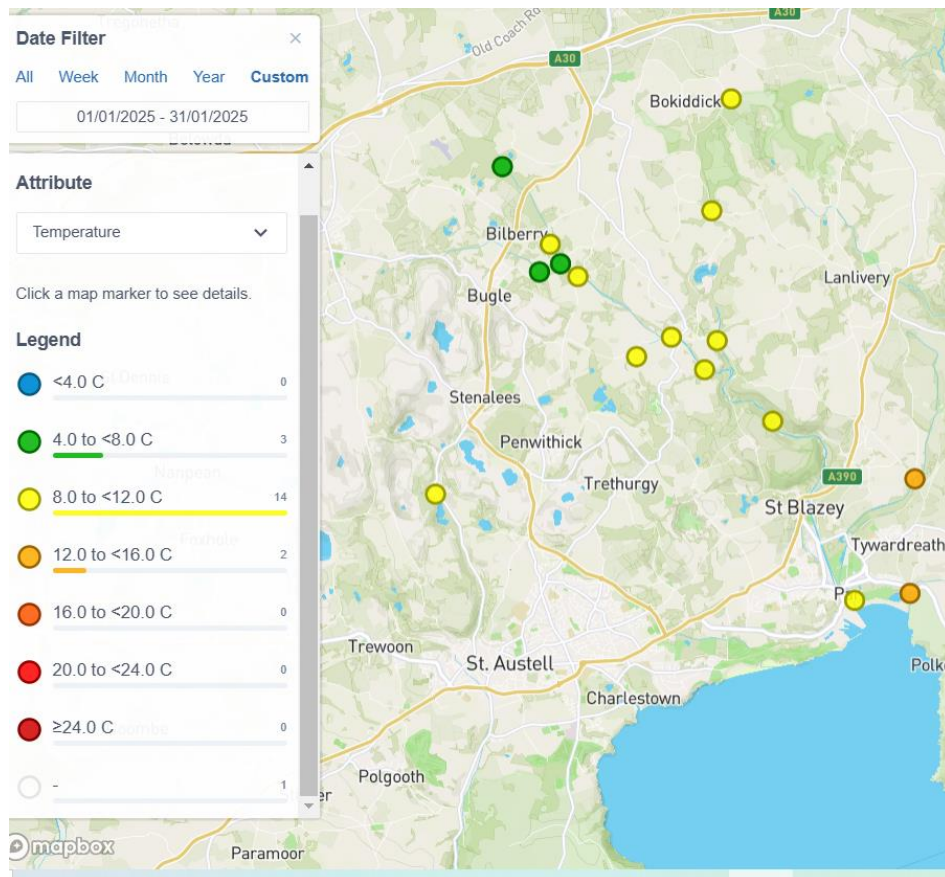
The times have been included in case that explains some of the variations in water temperature.

## D. 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.



## 2. Results January 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.

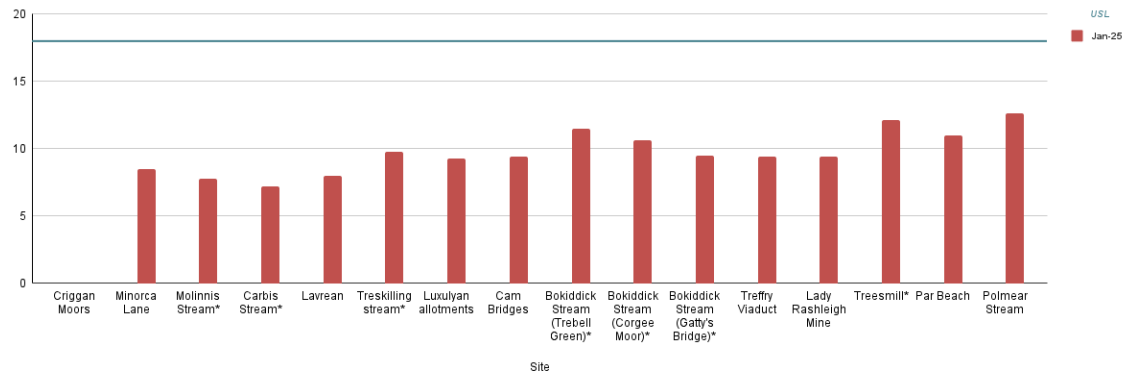
From December 2023 all readings have been taken with the new thermometer/TDS device. Previously, all Upper Par readings, except for Lady Rashleigh Mine, have been taken with the old device. There is a worrying discrepancy with the readings on the older devices.

PAR RIVER/TRIBUTARY	LOCATION	Temperature °Celsius
Par	Criggan Moors, Par River, SX 01882 61133	5.9
Par	South of Minorca Lane, Par River, SX 02657 59788	8.5
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271	7.8
Tributary	Carbis Stream SX 02834 59401	7.2
Par	Lavrean, Par River SX 03134 59164	8
Tributary	Treskilling, Treskilling Stream, SX 04107 57726	9.8
Par	Luxulyan allotments, Par River, SX 04732 58045	9.3
Par	Cam Bridges, Par River, SX 05292 57454	9.4
Tributary	Trebell Green, Bokiddick Stream SX 0551960226	11.5
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167	10.6
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953	9.5
Par	Treffry Viaduct, Par River, SX 05650 57179	9.4
Par	Lady Rashleigh Mine, Par River, SX 06451 56509	9.4
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385	12.1
Par	Par Beach slipway, SX 0776 53261	11.4
Tributary	Polmear Stream, Ship Inn, SX 08749 53417	12.6

### 3. Graphs

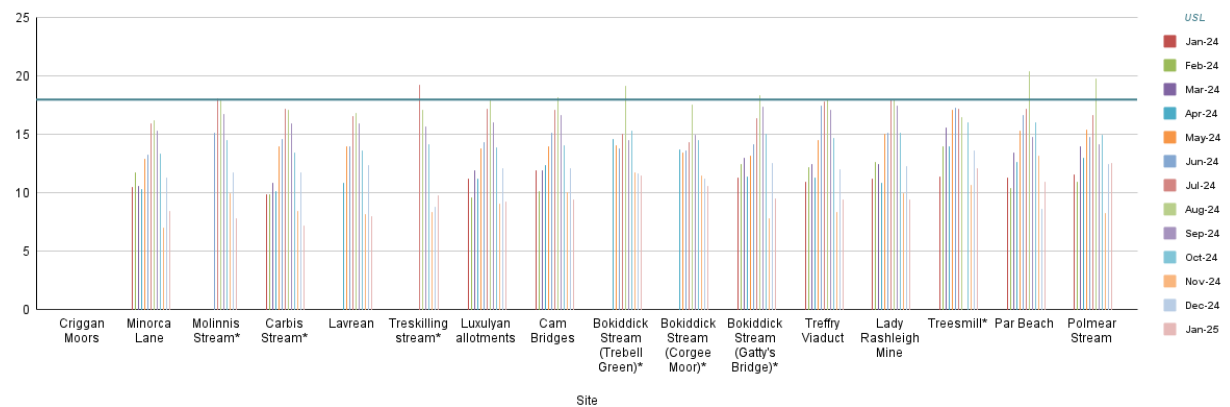
#### (a) This month:

Par River Temperature (°Celsius) - Filtered



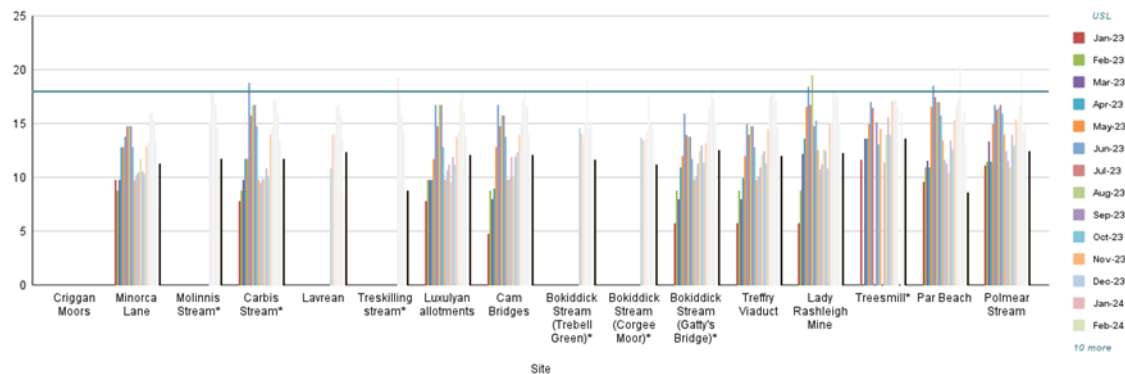
#### (b) From 1<sup>st</sup> January 2024 until now:

Par River Temperature (°Celsius) - Filtered



#### (c) From 1<sup>st</sup> January 2023 until now:

Par River Temperature (°Celsius) - Filtered

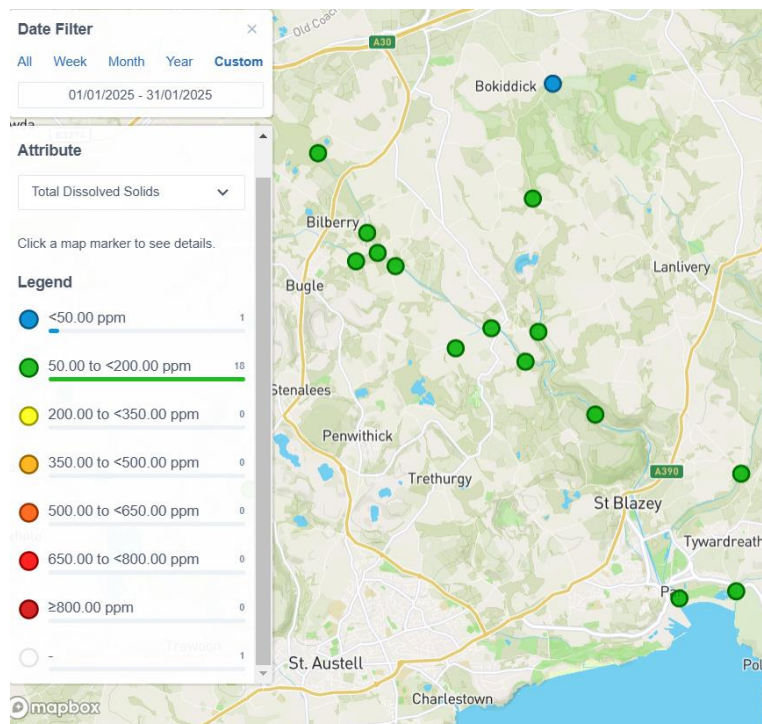


## D. TOTAL DISSOLVED SOLIDS

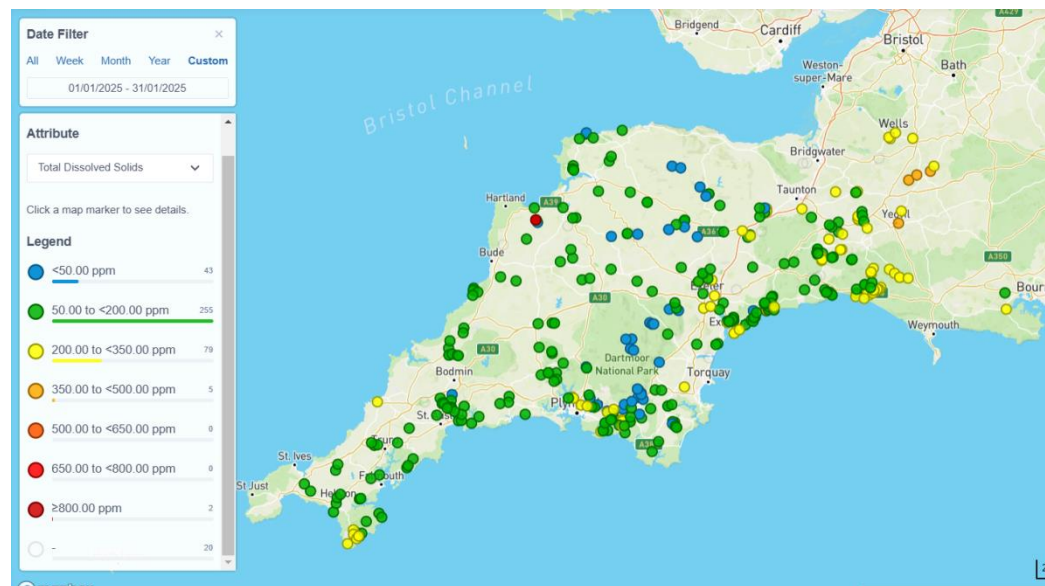
1. We measure these in ppm (parts per million). This is the WRT's explanation:

*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.







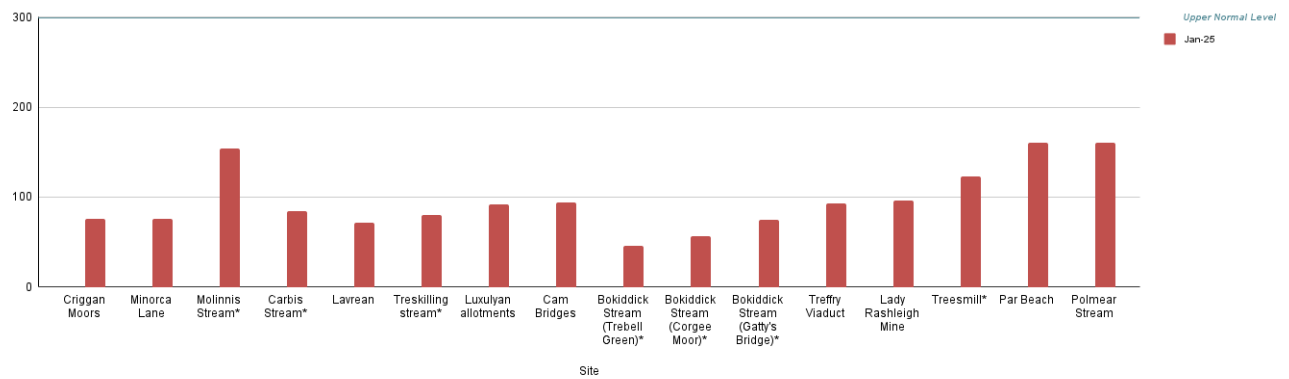
## 2. Results January 2025

PAR RIVER/TRIBUTARY	LOCATION	Total Dissolved Solids PPM
Par	Criggan Moors, Par River, SX 01882 61133	76
Par	South of Minorca Lane, Par River, SX 02657 59788	59
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271	154
Tributary	Carbis Stream SX 02834 59401	84
Par	Lavrean, Par River SX 03134 59164	72
Tributary	Treskilling, Treskilling Stream, SX 04107 57726	80
Par	Luxulyan allotments, Par River, SX 04732 58045	92
Par	Cam Bridges, Par River, SX 05292 57454	94
Tributary	Trebell Green, Bokiddick Stream SX 0551960226	46
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167	56
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953	75
Par	Treffry Viaduct, Par River, SX 05650 57179	93
Par	Lady Rashleigh Mine, Par River, SX 06451 56509	96
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385	123
Par	Par Beach slipway, SX 0776 53261	160
Tributary	Polmear Stream, Ship Inn, SX 08749 53417	161

### 3. Graphs

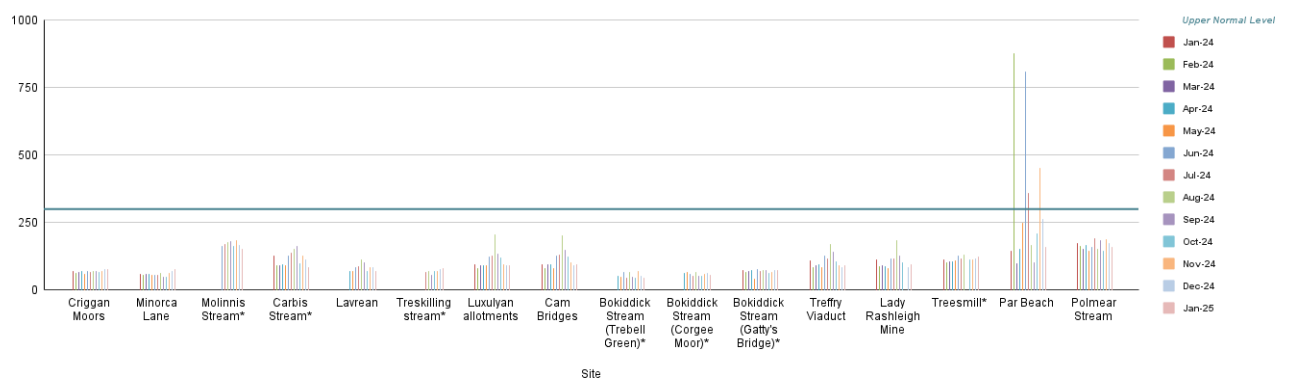
#### (a) This month:

Par River Total Dissolved Solids (PPM) - Filtered



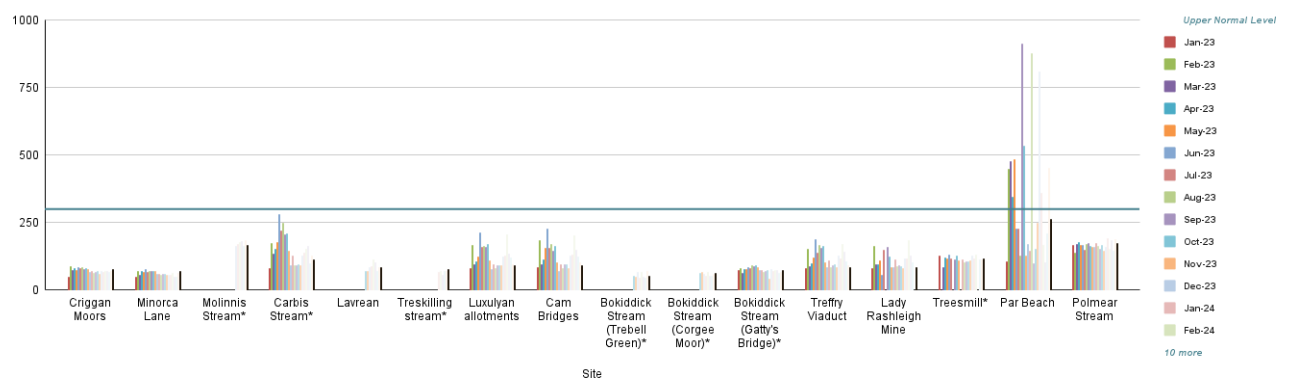
#### (b) From 1<sup>st</sup> January 2024 until now:

Par River Total Dissolved Solids (PPM) - Filtered



#### (c) From 1<sup>st</sup> January 2023 until now

Par River Total Dissolved Solids (PPM) - Filtered



## E. TURBIDITY

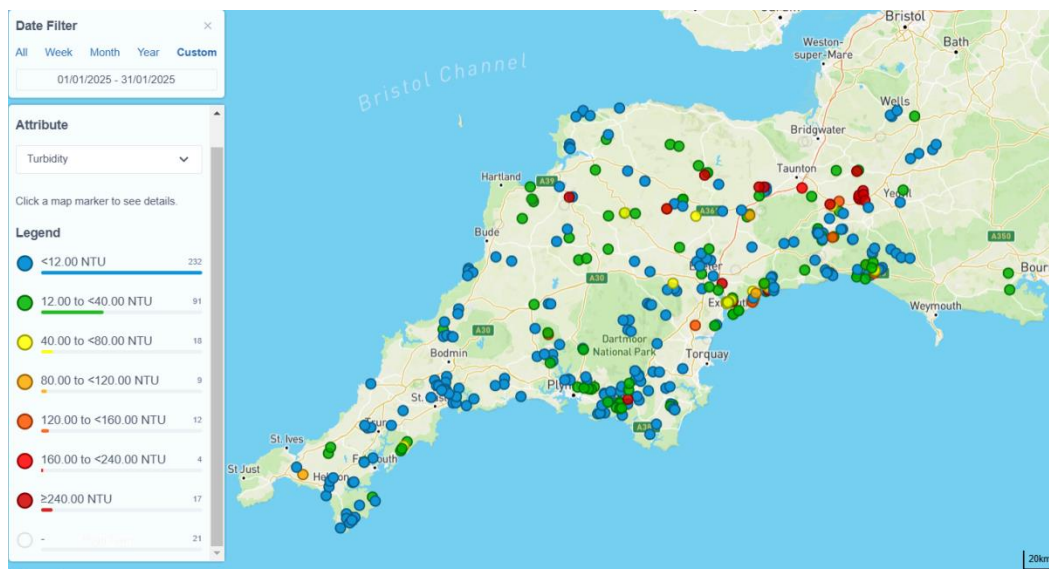
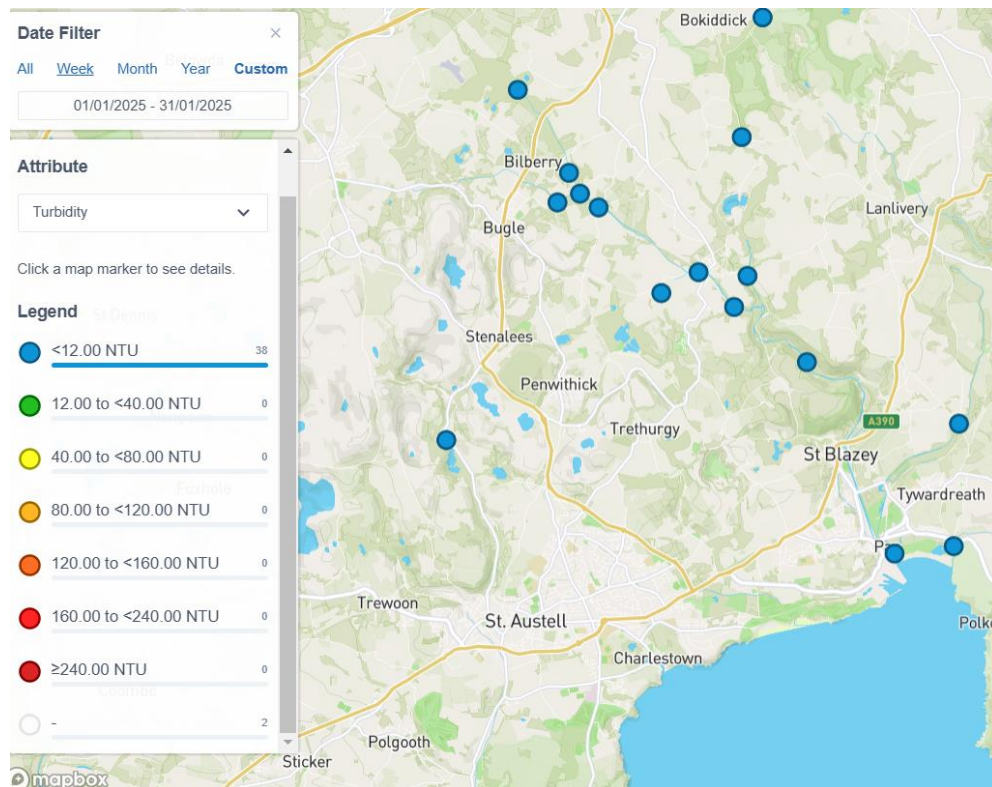
1. This is the WRT explanation of this measure:

*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. Results January 2025:

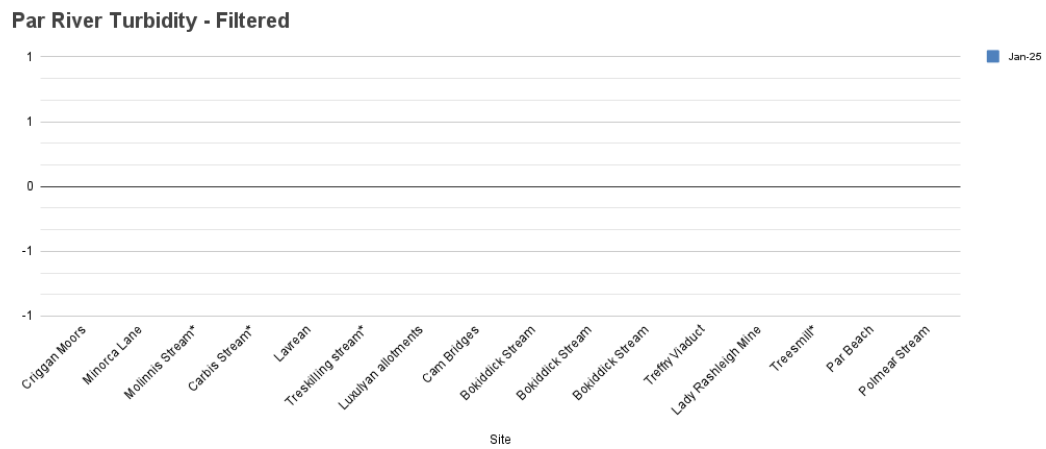
PAR RIVER/TRIBUTARY	LOCATION	Turbidity (NTU)
Par	Criggan Moors, Par River, SX 01882 61133	<12
Par	South of Minorca Lane, Par River, SX 02657 59788	<12
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271	<12
Tributary	Carbis Stream SX 02834 59401	<12
Par	Lavrean, Par River SX 03134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

### 3. Geographical comparison. Source: Cartographer.

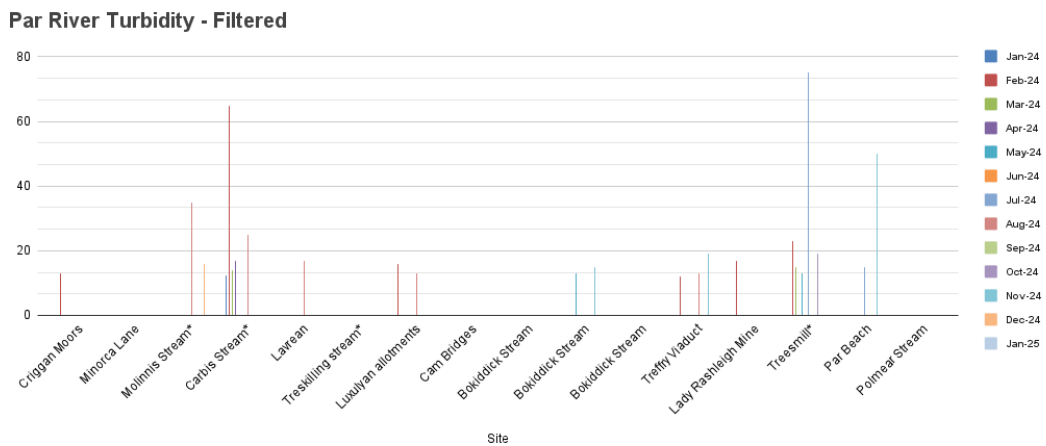


## 4. Graphs

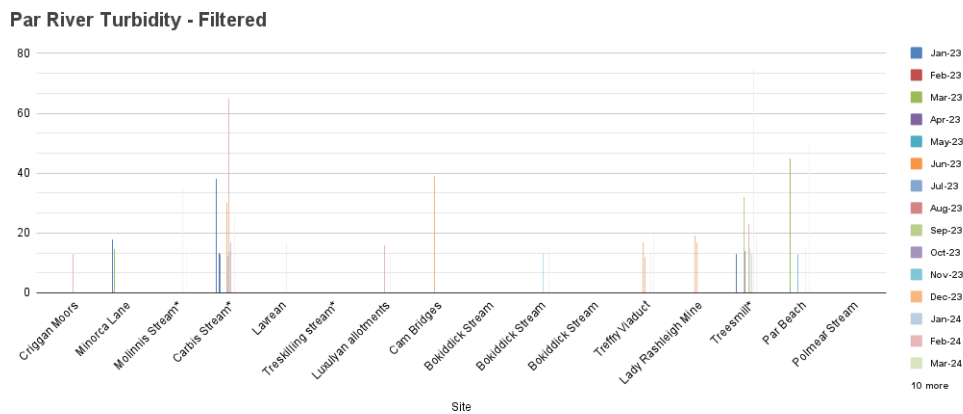
**(a) This month:**



**(b) From January 2024 until now:**



**(c) From January 2023 until now:**





## E. 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*

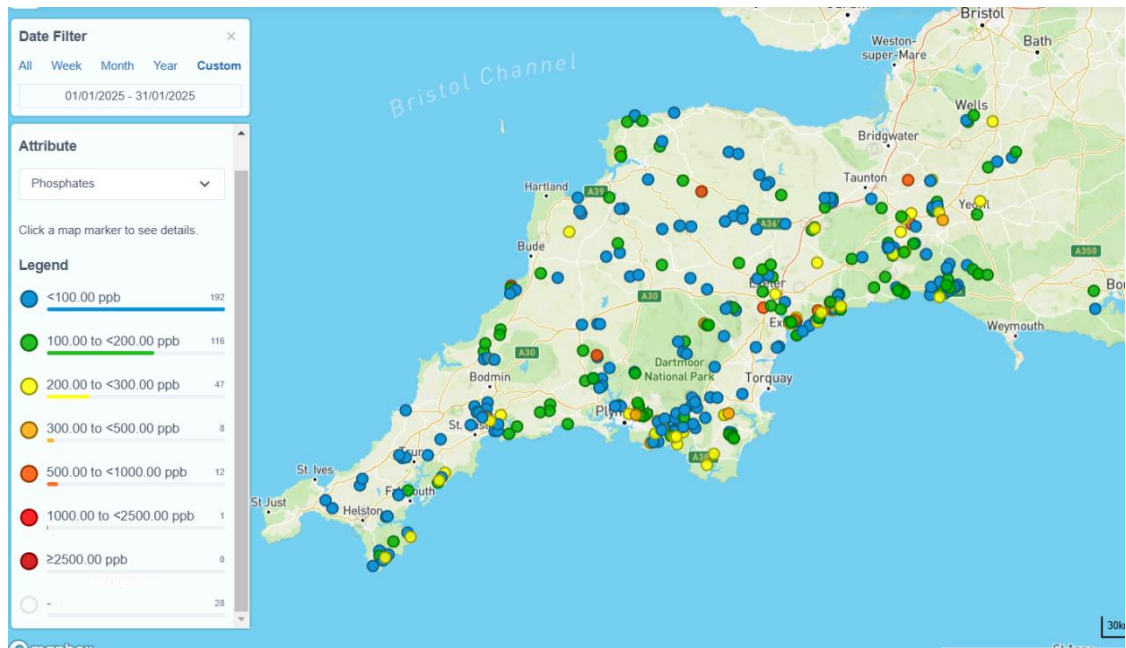
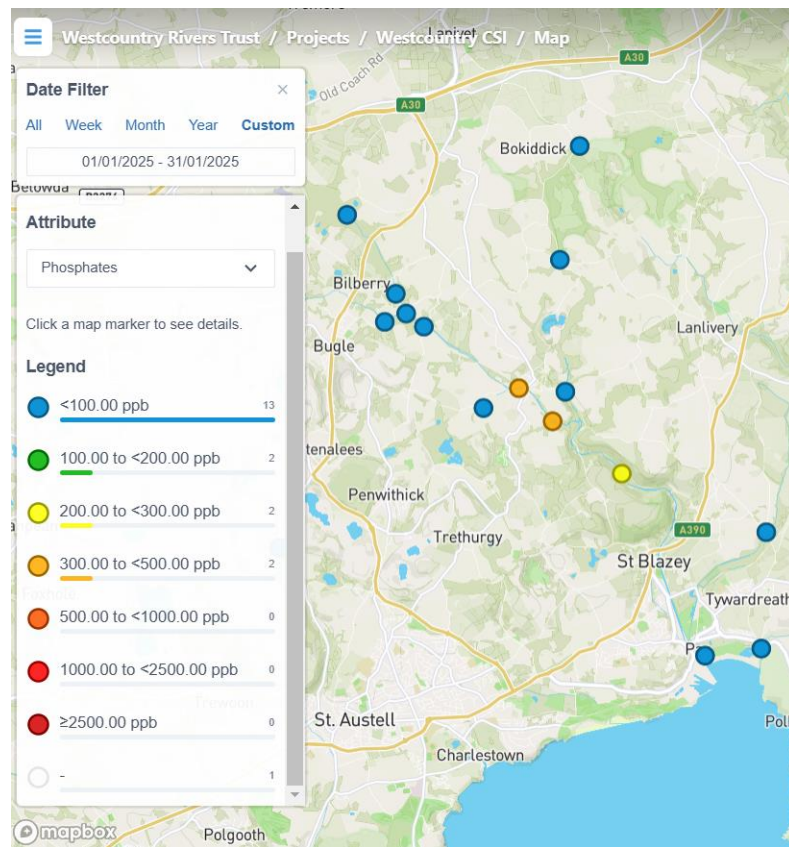
*500 – 2500 – TOO HIGH*

## 2. Results January 2025

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	300
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	200
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	0

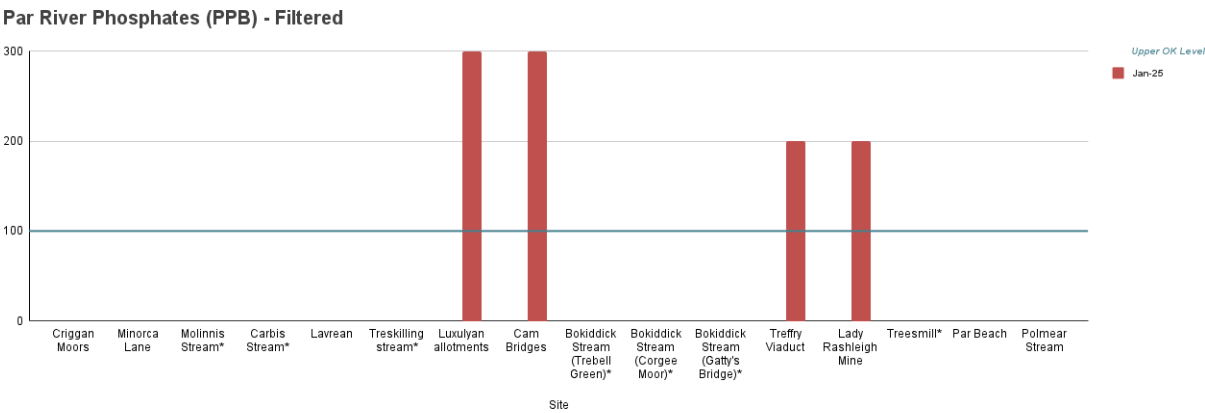
Results in red show phosphate levels that are classified as 'High' (above the upper safe level). WRT advice is that this is 100 Parts per Billion (0.1 mg/l).

### 3. Geographical comparison. Source: Cartographer.

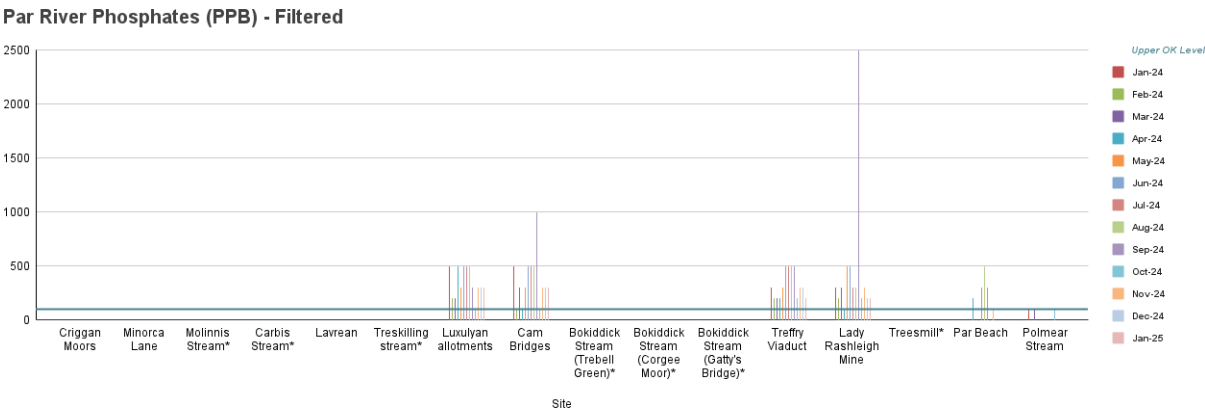


4. Graphs

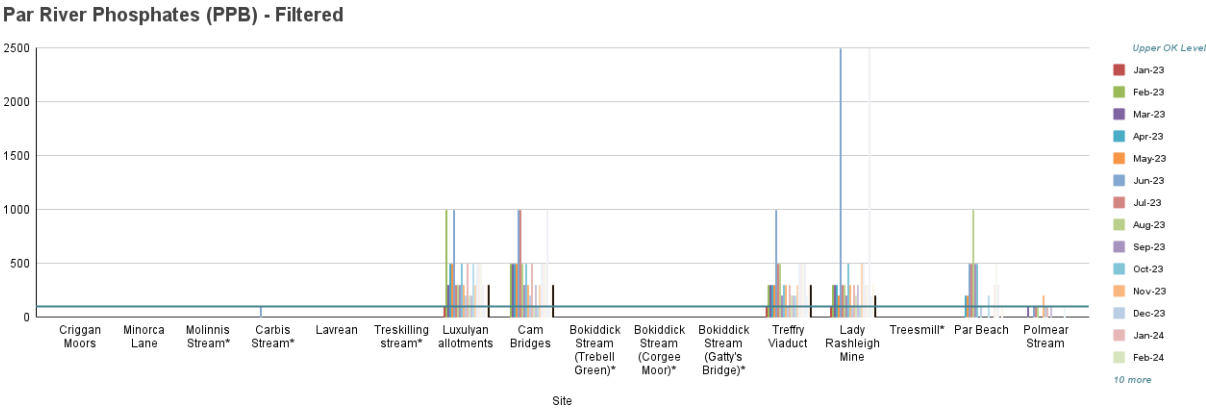
(a) This month:



(b) From January 2024 until now:



(c) From January 2023 until now:



## G. WILDLIFE & INVASIVE PLANTS

Evidence of otters is found nearly every month, but frequently it is not found at our monitoring points and when it is it will be entered under 'Other' because live sightings are extremely rare. However, in October, a combination of high river levels and a lack of time meant that no evidence was found. This does not mean that otters were not present. Bird identification in **blue** shows their song was identified on the Merlin Bird App (<https://merlin.allaboutbirds.org/>).

**Wildlife & Invasive Plants sightings at the monitoring points included:**

LOCATION	WILDLIFE NOTED	INVASIVE PLANTS NOTED
Criggan Moors, SX 01882 61133	<b>Blue Tit, Treecreeper, Chaffinch</b>	None
South of Minorca Lane, Par River, SX 02657 59788	<b>Blue Tit, Great Tit, Song Thrush, Robin, Dunnock, Chaffinch</b>	None
Forkandles Farm, Molinnis Stream, SX 02460 59271	<b>Redwing, Blue Tit, Great Tit</b>	Japanese Knotweed (dead)
Carbis Stream SX 02834 59401	<b>Blue Tit</b>	None
Lavrean, Par River SX 03134 59164	<b>Blue Tit</b> Recent otter spraint (first discovery at this site)	None
Treskillig, Treskillig Stream, SX 04107 57726	<b>Blue Tit, Great Tit, Robin</b>	None
Luxulyan allotments, Par River, SX 04732 58045	<b>Robin, Great Tit, wren, Song Thrush, Chaffinch</b>	None
Cam Bridges, Par River, SX 05292 57454	None	None
Trebell Green, Bokiddick Stream SX 0551960226	Lake created by beaver dam. <b>Blue Tit, Great Tit, Redwing, Goldfinch, Blackbird</b>	None
Corgee Moor, Bokiddick Stream SX 0593462167	<b>Blue Tit</b>	None
Gatty's Bridge, Bokiddick Stream SX 05531 57953	None	None
Treffry Viaduct, Par River, SX 05650 57179	None	None
Lady Rashleigh Mine, Par River, SX 06451 56509	Dipper (seen). Recent otter spraint.	None
Treesmill, Tywardreath Stream, SX 08873 55385	None	None
Par Beach slipway, SX 0776 53261	Pigeons, gulls	None
Polmear Stream, Ship Inn, SX 08749 53417	Robin	None

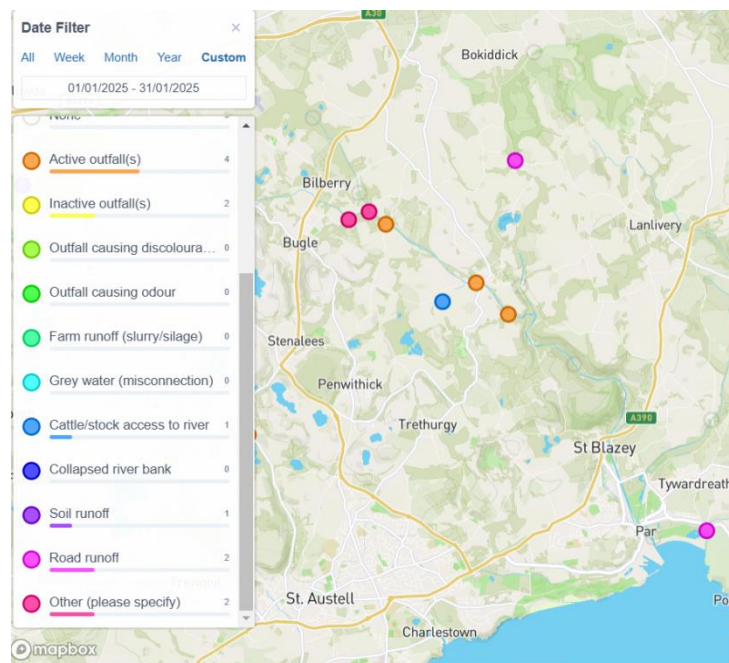




Loo with a view. Recent otter spraint upstream from Lavrean Bridge. Fish bones and scales were visible.

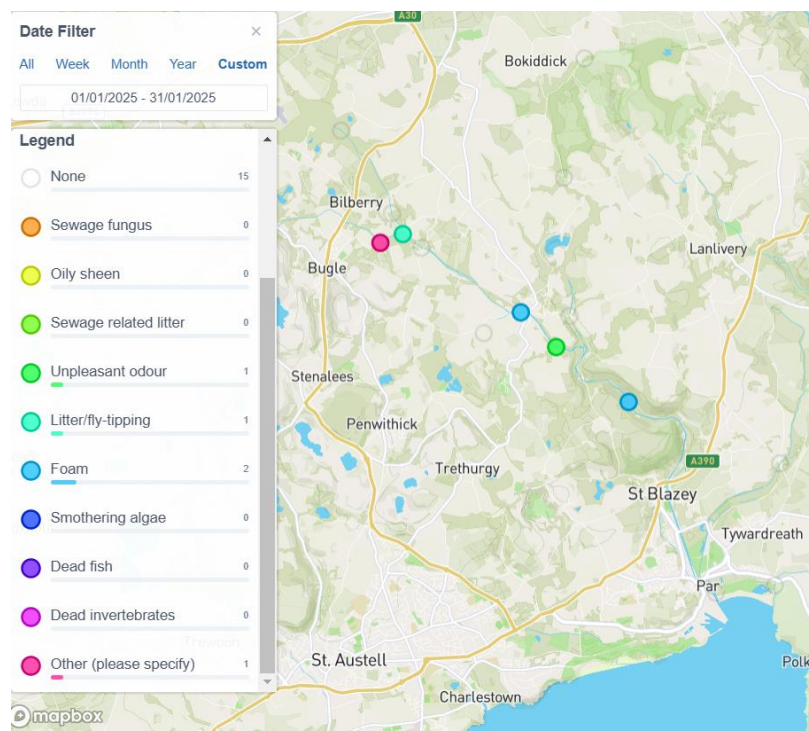
## H. POLLUTION SOURCES AND EVIDENCE

### 1. Visible sources of pollution (source: Cartographer)





2. Recent evidence of pollution



### 3. Evidence of pollution found in January's CSI monitoring:

LOCATION	POLLUTION
Criggan Moors, SX 01882 61133	None observed.
South of Minorca Lane, Par River, SX 02657 59788	None observed.
Forkandles Farm, Molinnis Stream, SX 02460 59271	Very slight grey-tinge to the water (china clay)
Carbis Stream SX 02834 59401	Slight grey-tinge to the water (china clay)
Lavrean, Par River SX 03134 59164	None observed.
Treskillling, Treskillling Stream, SX 04107 57726	Foam.
Luxulyan allotments, Par River, SX 04732 58045	Foam.
Cam Bridges, Par River, SX 05292 57454	Foam. Smell.
Trebell Green, Bokiddick Stream SX 0551960226	None observed.
Corgee Moor, Bokiddick Stream SX 0593462167	None observed.
Gatty's Bridge, Bokiddick Stream SX 05531 57953	None observed.
Treffry Viaduct, Par River, SX 05650 57179	None observed.
Lady Rashleigh Mine, Par River, SX 06451 56509	Foam.
Treesmill, Tywardreath Stream, SX 08873 55385	None observed.
Par Beach slipway, SX 0776 53261	None observed.
Polmear Stream, Ship Inn, SX 08749 53417	None observed.

## 4. South West Water Storm Overflows

### (a) WaterFit Live

South West Water has a website giving live information about storm overflows from its facilities: <https://www.southwestwater.co.uk/storm-overflow-map>. The following screenshot explains the data available.

**South West Water** WaterFit Live Storm Overflow Map

**What this map shows you**  
This map shows our [storm overflows](#) and whether they are currently active.

**Map Key**

- Storm overflow is currently not activated
- Storm overflow has activated in the last 24 hours
- Storm overflow is currently activated
- Designated Bathing Water
- Outlet location
- Monitor is offline or unavailable

[Storm overflows](#) act like safety valves on the wastewater network. When the system becomes too full (for example, after heavy rain) storm overflows release the excess. If they didn't work, sewage would build up in pipes and flood into people's gardens and homes.

Every storm overflow has an Event Duration Monitor (EDM) that measures the level of sewage in the system and indicates whether the overflow is active, and for how long. They do not measure the volume of sewage spilling from the overflow, only the level, and they alert us when that level has reached the point where the overflow starts to spill. This means that an EDM will trigger an alert even when the volume of the spill itself is very low.

This sensitivity means that sometimes small things, like leaves, twigs or even spider webs, bubbles and foam can trigger them, indicating that the overflow is in use when it isn't. This map does not distinguish these 'false' readings, but rather provides near real-time data, as we receive it, before we've investigated why an EDM is activated.

All EDMs send us data at least every 15 minutes (and in some cases, every 10 seconds). Using this, together with other data, we can spot issues in the network, and respond as necessary. We also use this data to model our system and identify areas for improvement.

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> )

**Remember:** Avoid entering the water immediately downstream of these discharges and avoid the storm overflows, especially after it has been raining.

#### Storm overflows with Event Duration Monitoring

Counted spills using 12-24h counting method

- > 99 - 365
- > 59 - 99
- > 39 - 59
- > 19 - 39
- > 0 - 19
- 0

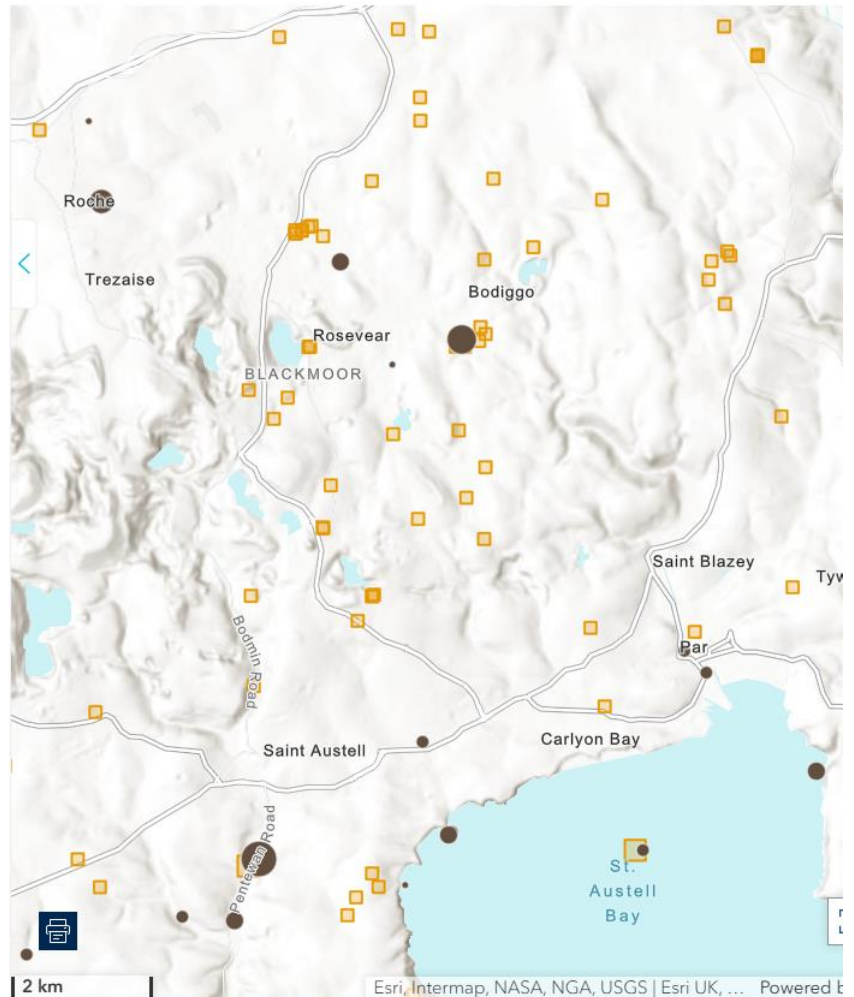
#### Storm overflows without Event Duration Monitoring

- 

#### Treated sewage discharges

- Water company
- Not water company

Use the search box or zoom on the map to find your location or click on the 'Investigate' tab to view summary statistics by constituency, water company, and more.







**(c) SWW Storm Overflow spills**

LOCATION/WATERCOURSE	SPILLS 2020	SPILLS 2021	SPILLS 2022	SPILLS 2023	SPILLS TARGET
Victoria pumping station overflow, Roche (SWW1266) Into Par River	41	26	42	59	39 (2030) 10 (2050)
Molinnis storm overflow, Bugle (SWW0765) Into tributary of Par River	28	38	7	38	8 (2030) 27 (2050)
Rescorla storm overflow, Luxulyan (SWW0987) Into 'Tributary of Par Sands (S)' [sic]	n/a	n/a	0	0	0 (2030) 0 (2050)
Luxulyan sewage treatment works settled storm overflow, St Austell (SWW0694) Into Par River	64	55	36	80	10 (2030) 8 (2050)
Tredenham Close storm overflow, Par (SWW1230) Into St Blazey stream	8	3	6	5	6 (2030) 6 (2050)
Par No2 pumping station overflow, Par (SWW0519) Into Par River	12	2	5	8	8 (2030) 8 (2050)

Figures for 2024 have not been posted on the map yet.

**(d) SWW Storm Overflow spills January 2025:**

LOCATION/WATERCOURSE	SPILLAGES
Victoria pumping station overflow, Roche (SWW1266) Into Par River	Started: 26 Jan 2025 20:24 Stopped: 26 Jan 2025 20:49
Molinnis storm overflow, Bugle (SWW0765) Into tributary of Par River	Started: 26 Jan 2025 20:34 Stopped: 26 Jan 2025 21:42
Rescorla storm overflow, Luxulyan (SWW0987) Into 'Tributary of Par Sands (S)' [sic]	Last reported: Started: 24 Nov 2024 20:31 Stopped: 24 Nov 2024 20:35
Luxulyan sewage treatment works settled storm overflow, St Austell (SWW0694) Into Par River	Started 24 Jan 2025 4:30 Stopped: 24 Jan 2025 18:59 Started 26 Jan 2025 10:10 Stopped: 29 Jan 2025 12:57
Tredenham Close storm overflow, Par (SWW1230) Into St Blazey stream	Started: 15 Jan 2025 14:55 Stopped: 15 Jan 2025 14:56
Par No2 pumping station overflow, Par (SWW0519) Into Par River	Last reported:  Started: 16 Oct 2024 00:47 Stopped: 16 Oct 2024 01:31

## J. 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 Harrison. 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, Chloe Lake, 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 and Callum Lewis 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 and Peter Scobie, have been invaluable.

## ADDITIONAL SUPPORTERS JANUARY 2025

The close interest in river monitoring shown by these locals near the Treskilling Stream was much appreciated; interestingly, and unlike the current Chancellor of the Exchequer, their support implied an understanding that the protection of nature and promotion of increased biodiversity are important.



Roger Smith, 11<sup>th</sup> February 2025

