# 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.**

# OCTOBER 2024

**The Polmear Stream near Par Beach. Photo: Simon Tagney**

| CONTENT | PAGES |
|---|---|

## A. OUR OCTOBER 2024 FINDINGS AT A GLANCE (SEE SECTIONS C TO I FOR FULL PICTURE)

### 1. Data

We sampled at 16 locations on the 17th October 2024. 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 13.6<br>Median 13.6<br>Min 13<br>Max 14.1 | Mean 15.33<br>Median 15.2<br>Min 14.7<br>Max 16.1 | Mean 14.51<br>Median 14.5<br>Min 13.5<br>Max 15.3 | Mean 15.55<br>Median 15.55<br>Min 15<br>Max 16.1 |
| TOTAL DISSOLVED SOLIDS PPM (SHOULD NOT EXCEED 300 PPM) | Mean 85.6<br>Median 71<br>Min 49<br>Max 124 | Mean 139<br>Median 106<br>Min 103<br>Max 208 | Mean 822.33<br>Median 66.5<br>Min 47<br>Max 162 | Mean 128<br>Median 128<br>Min 112<br>Max 144 |
| TURBIDITY (SHOULD BE <12 ON SECCHI TUBE. FOR AVERAGING ANY READING <12 IS COUNTED AS 0) | Mean 0<br>Median 0<br>Min 0<br>Max 0 | Mean 0<br>Median 0<br>Min 0<br>Max 0 | Mean 0<br>Median 0<br>Min 0<br>Max 0 | Mean 9.5<br>Median 9.5<br>Min 0<br>Max 19 |
| PHOSPHATES PPB (SHOULD NOT EXCEED 100 PPB) | Mean 40<br>Median 0<br>Min 0<br>Max 100 | Mean **133.33**<br>Median **200**<br>Min 0<br>Max **200** | Mean 0<br>Median 0<br>Min 0<br>Max 0 | Mean 50<br>Median 50<br>Min 0<br>Max 100 |
| RIVERFLY SCORE (TRIGGER LEVEL AT LRM SHOULD BE ≥ 6) | RIVERFLY SURVEYS WILL RESUME IN SPRING 2025 | | | |
| WILDLIFE EVIDENCE | Cormorant | Swans | Deer tracks | None |
| INVASIVE PLANTS | Japanese Knotweed | None | Japanese Knotweed | None |
| EVIDENCE OF POLLUTION | Foam, smell, litter | Foam | Foam, grey-tinged water (china clay) | None |

### 2. Key points

#### (a) Positive signs

(i) Indirect evidence for the presence of fish in the Par River and Treskilling Stream comes in two forms: the sighting of a cormorant near Luxulyan allotments and a heron near Treskilling; anecdotal evidence about recent electro-fishing in the Par suggests an increase in trout numbers.

(b) Phosphate pollution was lower than last month, probably due to heavy rain.

#### (b) Points of concern

(i) Phosphate measures exceeded 100 PPB in the main Par River in Luxulyan Valley and reached 100 PPB in the Upper Par downstream from St Austell North STW and on the Polmear Stream. In the latter case the water industry will not be the cause, so other factors, such as farming, will need to be considered.

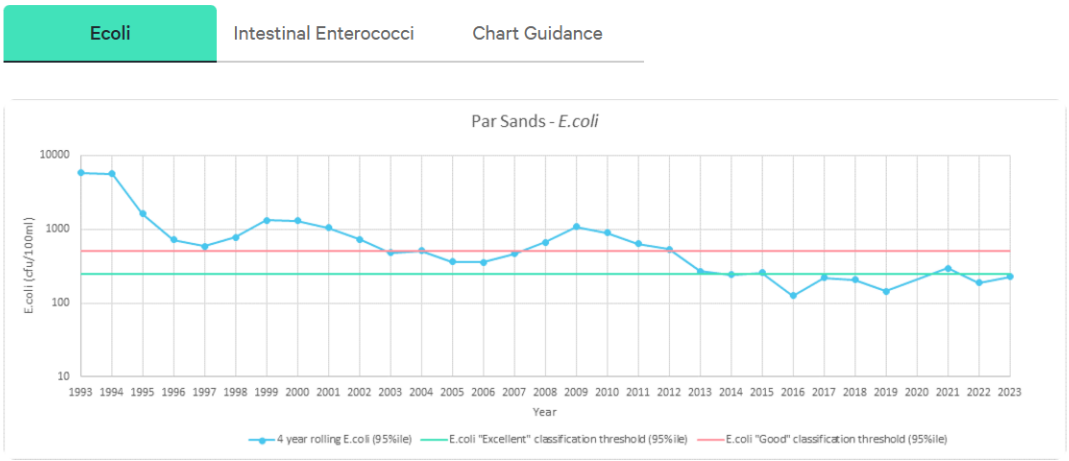
(ii) The anecdotal evidence from the electro-fishing indicated no signs of salmon in the Par River.

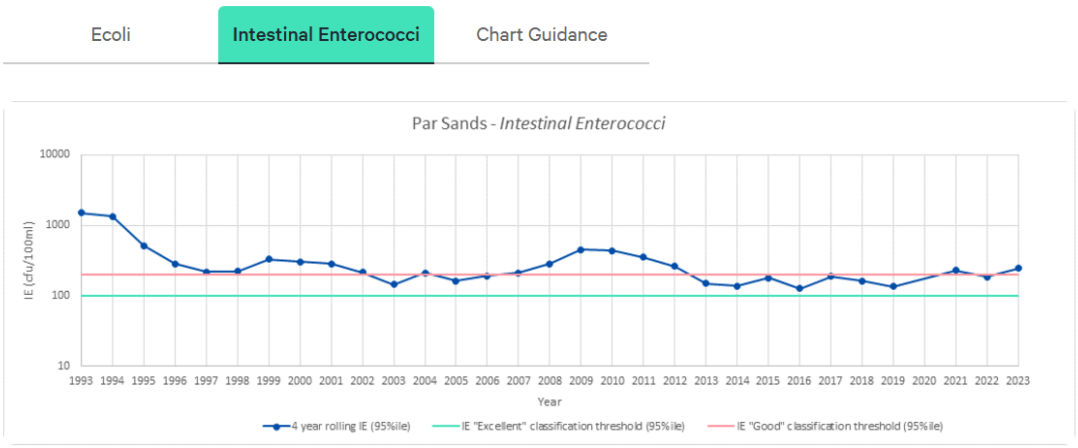
(iii) A lack of time and high river levels meant that no evidence of otters was found, but that should not be taken as evidence of their absence.

(iv) The smell at Cam Bridges was noticeable.

**(c) Areas for further research**

(i) Bathing water quality at Par Beach (rated as 'Sufficient' in 2023, 'Good' in 2022 and 2019, and 'Sufficient' in 2021) is only just of sufficient quality. This will be due to various factors, one of which is the impact of the water quality of the Par River. The Environment Agency (EA) samples the bathing water and is encouraging the public to report any problems by using a QR code obtainable from a notice-board at the beach. The EA monitors E.coli and Intestinal Enterococci as part of the calculations of bathing water quality. Both types of bacteria can be found in human and animal excrement (including canine faeces) but identifying the exact sources is a challenge.

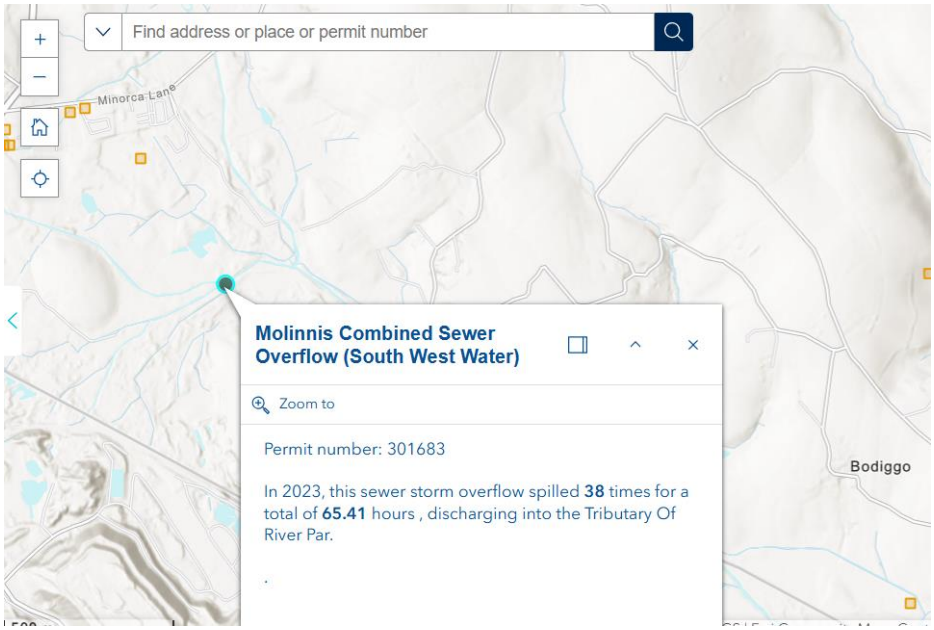





**Source:** https://www.southwestwater.co.uk/par-sands

(ii) There are two features next to the Molinnis Stream that may be part of the Molinnis Combined Sewer Overflow. The pipe that would discharge into the stream was dry, although a smell could be detected. A large metal plate nearby might be part of the CSO mechanism showed signs of toilet paper emerging at the sides. A strong smell of sewage was noted. It is not known if this is a matter of concern or if it has had a negative environmental influence.

This is the location of the CSO:

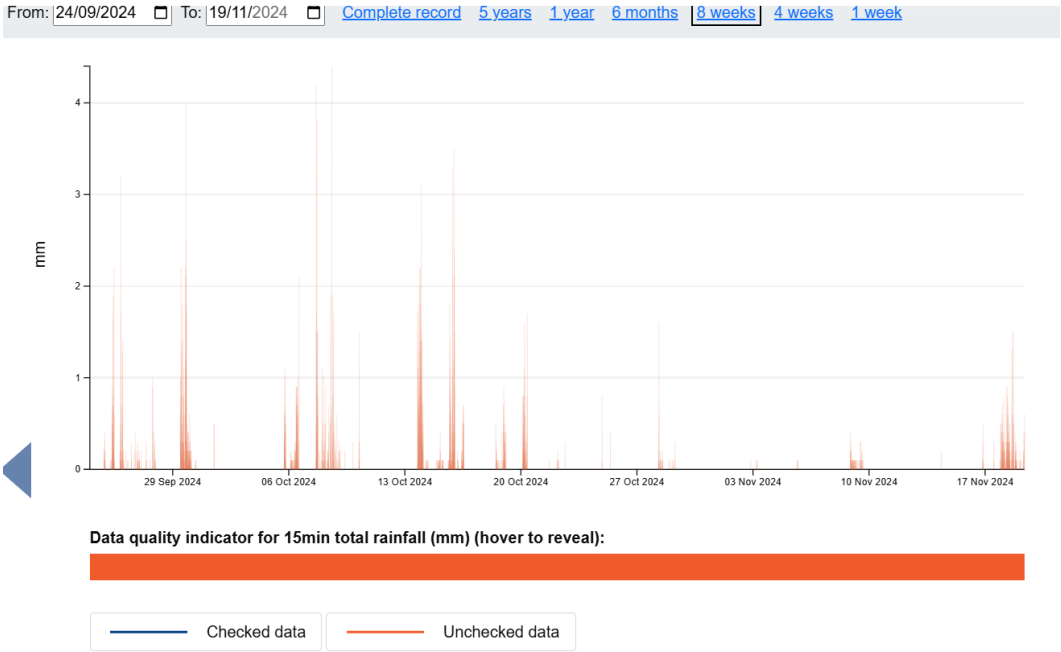



Source: https://theriverstrust.org/sewage-map


**Metal plate presumed to be part of a CSO tank near the Molinnis Stream.**

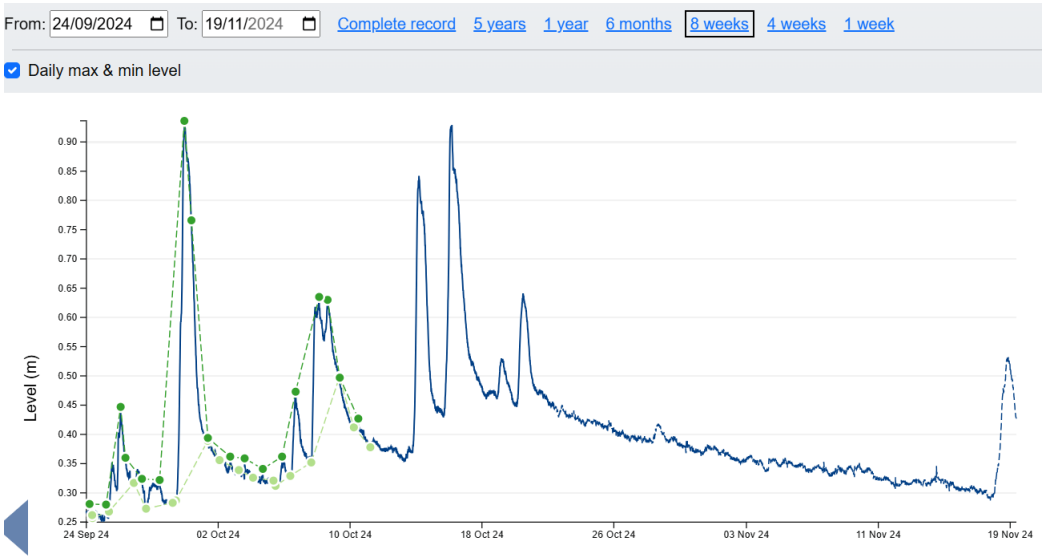
## B. RAINFALL, RIVER LEVELS AND FLOW

### 1. Rainfall at Luxulyan

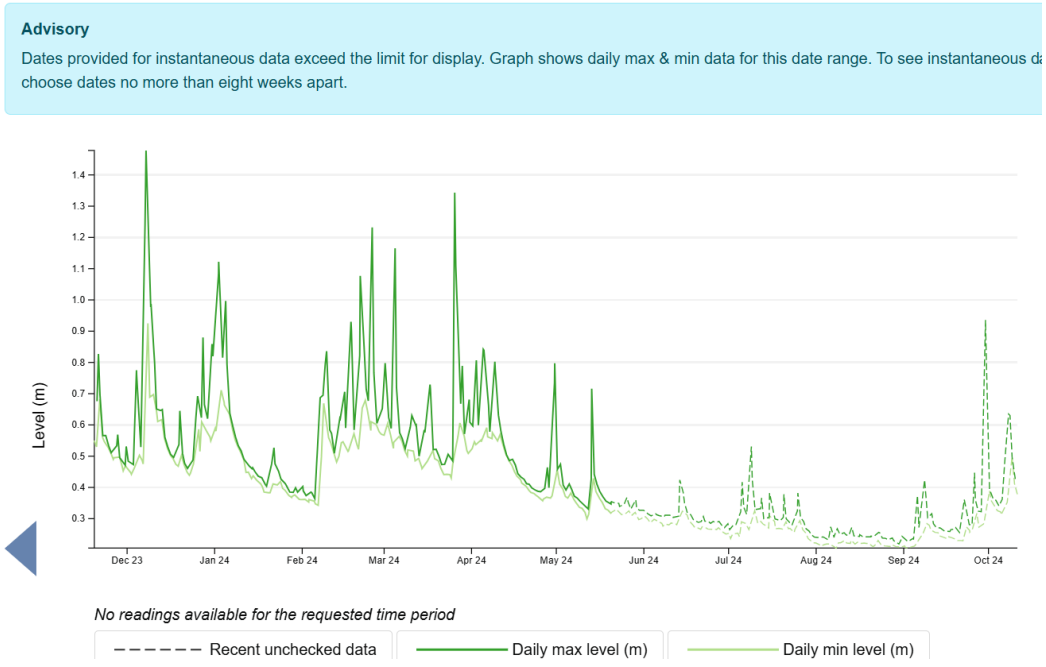


## 2. **Par River levels at Luxulyan preceding and during surveys.**

(a) **Source:** https://environment.data.gov.uk/hydrology/station/14aadf3c-3d4d-44b3-b26b-cf705827d00e



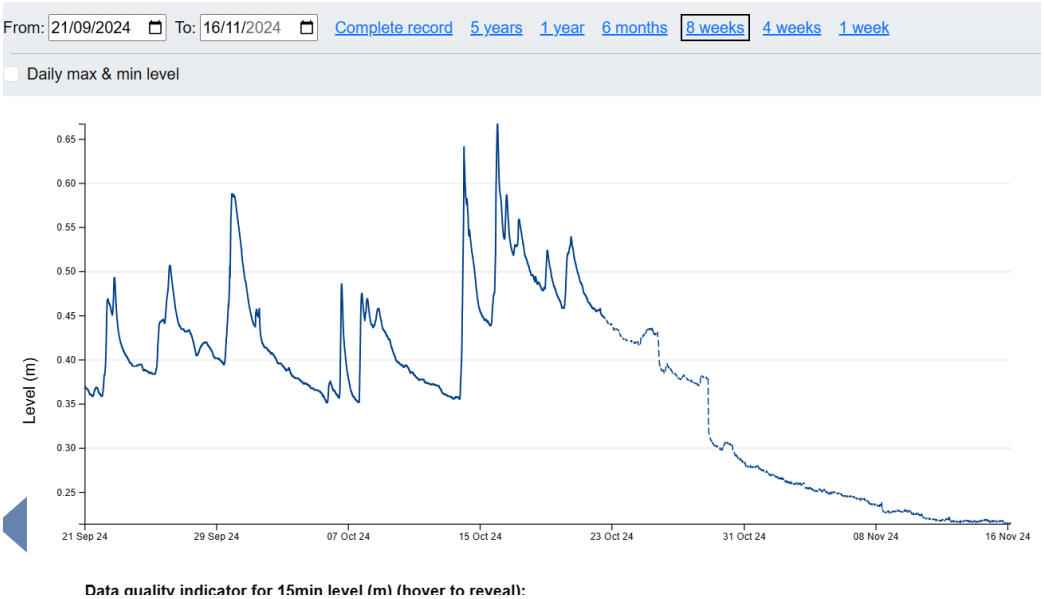

**(b) Maximum and minimum levels at Luxulyan for the last year:**



**(b) 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 |

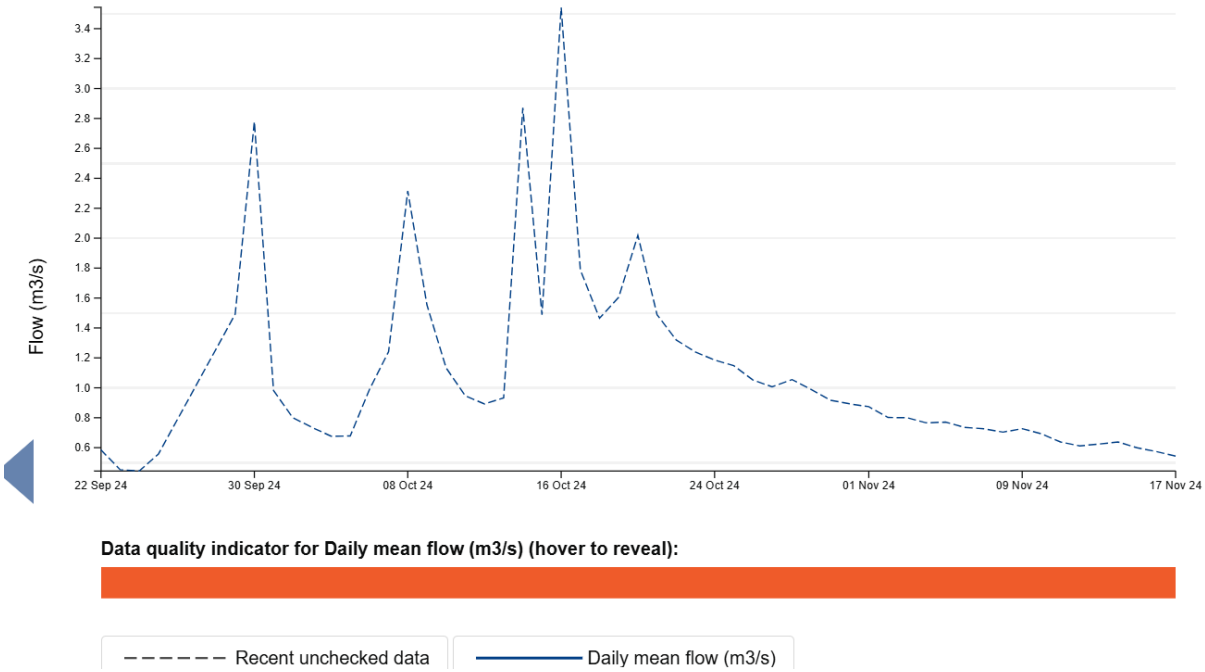
**3. Par River at St Andrews**



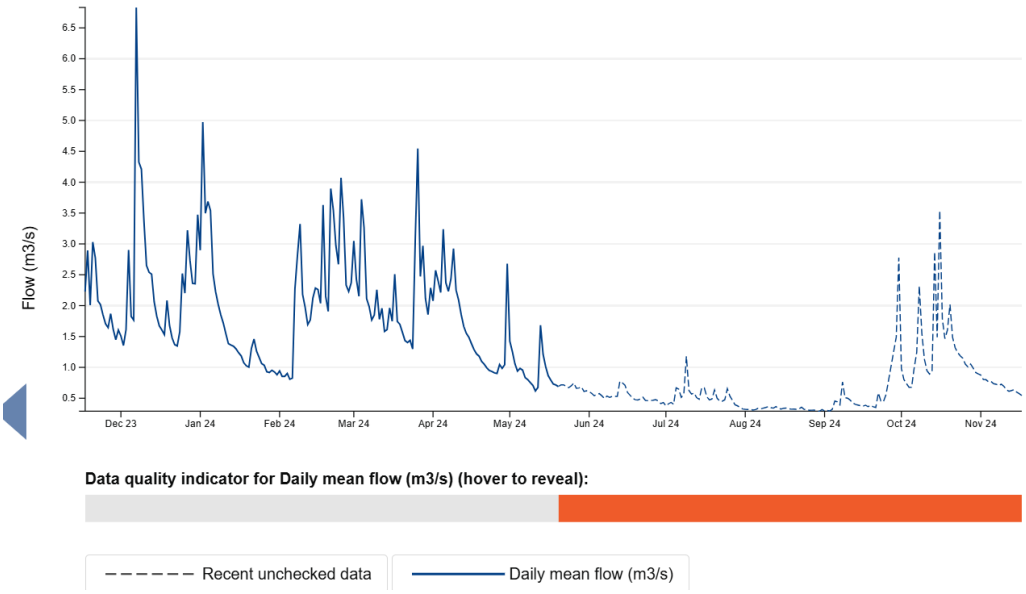

Data quality indicator for 15min level (m) (hover to reveal):

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

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



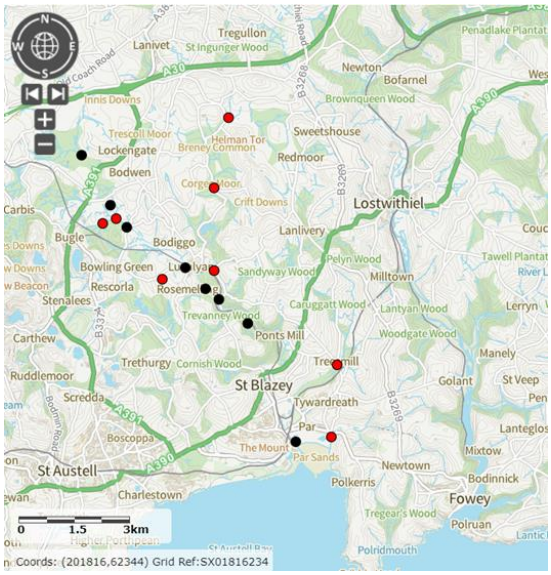

### (b) The last year N.B. More recent data is unchecked):



**5.** The graphs in sections 1 to 4 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 2024 MONITORING POINTS**

This month monitoring occurred at 15 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** | 17/10/2024 9:15 | CSI sample & Cartographer record. | Roger Smith |
| **South of Minorca Lane, Par River, SX02668 59747** | **PAR** | 17/10/2024 8:35 | CSI sampling. Cartographer record. | Roger Smith |
| **Near Forkandles farm, Molinnis Stream, SX 02460 59271** | **SECONDARY TRIBUTARY (OF CARBIS STREAM)** | 17/10/2024 10:20 | CSI sample & Cartographer record. | Roger Smith |
| **Carbis Stream SX 02834 59401** | **TRIBUTARY** | 17/10/2024 10:05 | CSI sampling. Cartographer record. | Roger Smith |
| **Lavrean, Par River SX 03134 59164** | **PAR** | 17/10/2024 10:40 | CSI sampling. Cartographer record. | Roger Smith |
| **Treskilling, Treskilling Stream, SX 04107 57726** | **TRIBUTARY** | 17/10/2024 11:20 | CSI sampling. Cartographer record. | Roger Smith |
| **Luxulyan allotments, Par River, SX 04732 58045** | **PAR** | 17/10/2024 11:45 | CSI sampling. Cartographer record. | Roger Smith |
| **Cam Bridges, Par River, SX 05292 57454** | **PAR** | 17/10/2024 13:20 | CSI sampling. Cartographer record. | Roger Smith |
| **Trebell Green, Bokiddick Stream SX 0551960226** | **TRIBUTARY** | 15/10/2024 12:00 | CSI sampling. Cartographer record. | Roger Smith |
| **Corgee Moor, Bokiddick Stream SX 0593462167** | **TRIBUTARY** | 15/10/2024 12:40 | CSI sampling. Cartographer record. | Roger Smith |
| **Gatty's Bridge, Bokiddick Stream SX 05531 57953** | **TRIBUTARY** | 17/10/2024 13:20 | CSI sampling. Cartographer record. | Joan Farmer |
| **Treffry Viaduct, Par River, SX 05650 57179** | **PAR** | 17/10/2024 15:25 | CSI sampling. Cartographer record. | Joan Farmer |
| **Lady Rashleigh Mine, Par River, SX 06451 56509** | **PAR** | 17/10/2024 14:30 | CSI sampling. Cartographer record. | Veronica Jones, Joan Farmer, Roger Smith |
| **Treesmill, Tywardreath Stream, SX 08873 55385** | **TRIBUTARY** | 17/10/2024 13:15 | CSI sampling. Cartographer record. | Maggie Tagney |
| **Par Beach slipway, SX 0776 53261** | **PAR** | 17/10/2024 12:45 | CSI sampling. Cartographer record. | Simon Tagney |
| **Polmear Stream, Ship Inn SX 08749 53417** | **TRIBUTARY** | 17/10/2024 13:17 | CSI sampling. Cartographer record. | Brian Harrisson |

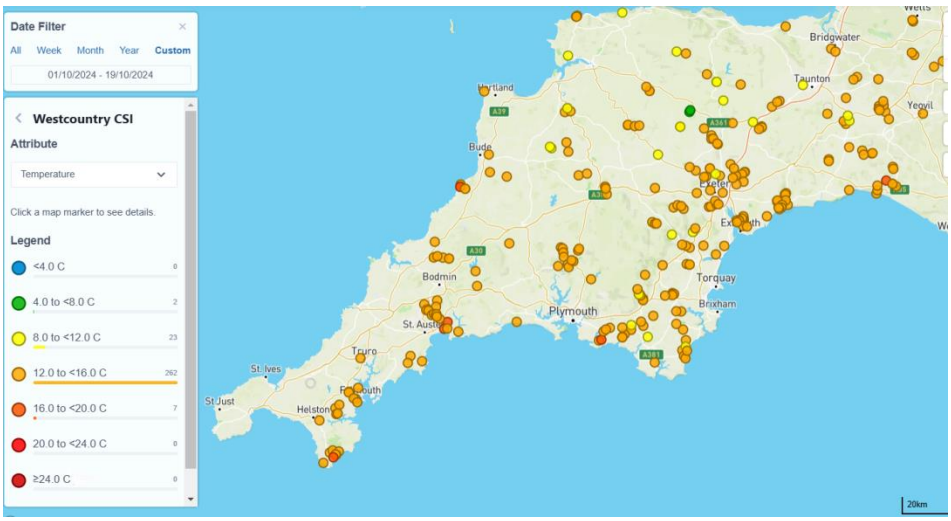
The times have been included in case that explains some of the variations in water temperature.

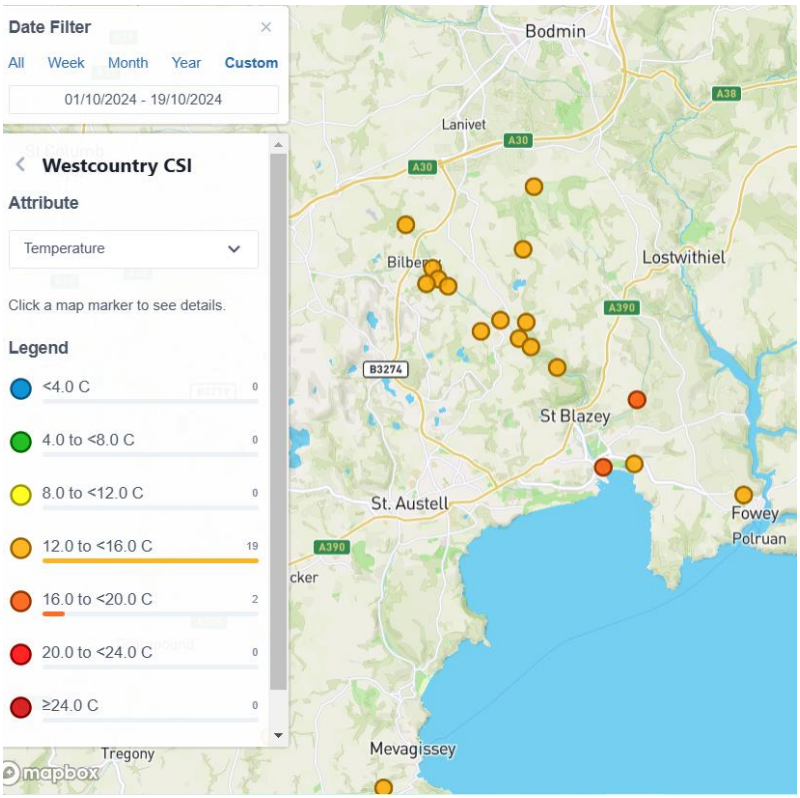
## D. TEMPERATURE

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.






### 3. Results October 2024

| PAR RIVER/TRIBUTARY | LOCATION | Temperature ˚Celsius |
|---|---|---|
| Par | Criggan Moors, Par River, SX 01882 61133 | **13** |
| Par | South of Minorca Lane, Par River, SX 02657 59788 | **13.4** |
| Secondary tributary | Near Forkandles Farm, Molinnis Stream, SX 02460 59271 | **14.5** |
| Tributary | Carbis Stream SX 02834 59401 | **13.5** |
| Par | Lavrean, Par River SX 03134 59164 | **13.6** |
| Tributary | Treskilling, Treskilling Stream, SX 04107 57726 | **14.2** |
| Par | Luxulyan allotments, Par River, SX 04732 58045 | **13.9** |
| Par | Cam Bridges, Par River, SX 05292 57454 | **14.1** |
| Tributary | Trebell Green, Bokiddick Stream SX 0551960226 | **15.3** |
| Tributary | Corgee Moor, Bokiddick Stream SX 0593462167 | **14.5** |
| Tributary | Gatty's Bridge, Bokiddick Stream SX 05531 57953 | **15.1** |
| Par | Treffry Viaduct, Par River, SX 05650 57179 | **14.7** |
| Par | Lady Rashleigh Mine, Par River, SX 06451 56509 | **15.2** |
| Tributary | Treesmill, Tywardreath Stream, SX 08873 55385 | **16.1** |
| Par | Par Beach slipway, SX 0776 53261 | **16.1** |
| Tributary | Polmear Stream, Ship Inn, SX 08749 53417 | **15** |

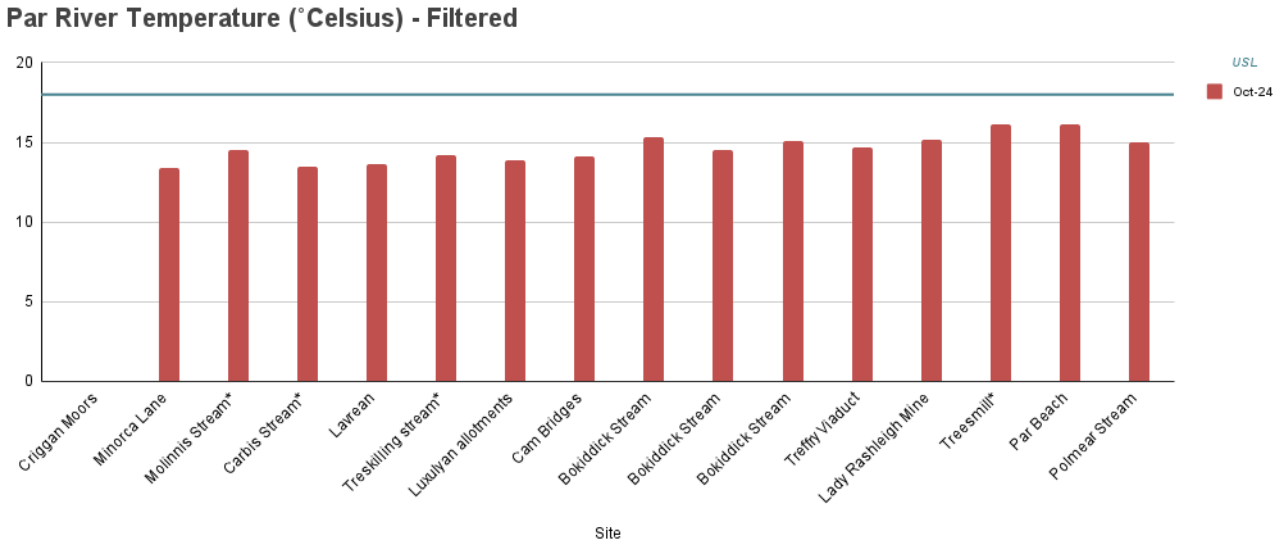
Results above the temperature at which fish and other organisms can function healthily will be shown in red. At present, 18 ˚Celsius is being used as the upper safe limit for fish and other

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.

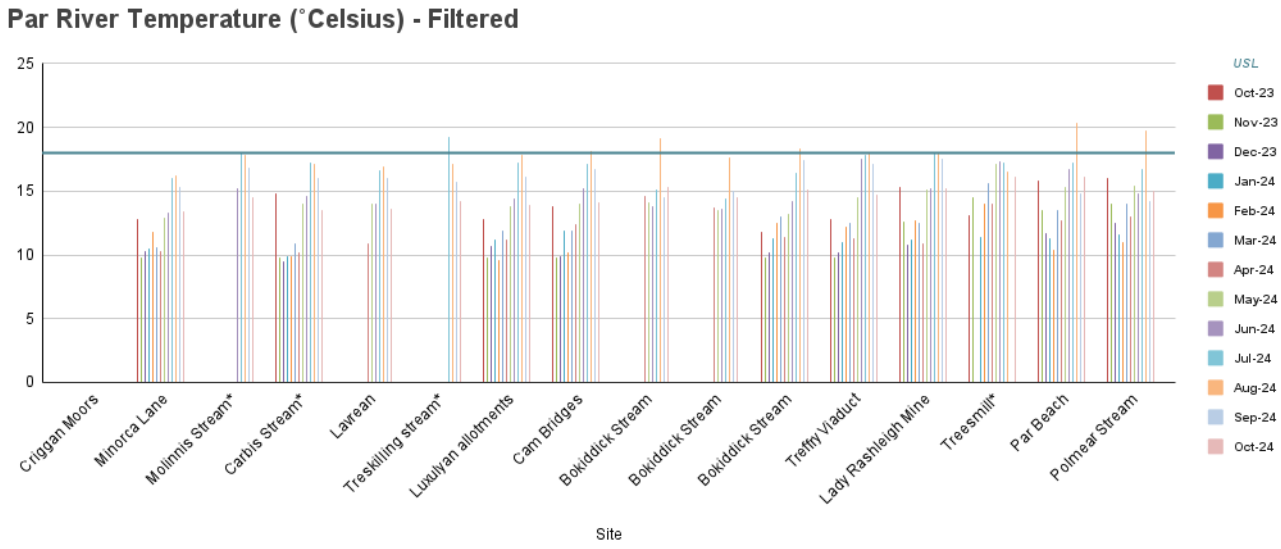
From December 2023 all readings have been taken with the new thermometer/TDS device. Previously, all Upper Par readings, except for Lady Rashleigh Mine, have been taken with the old device. There is a worrying discrepancy with the readings on the older devices.

**4. Graphs**

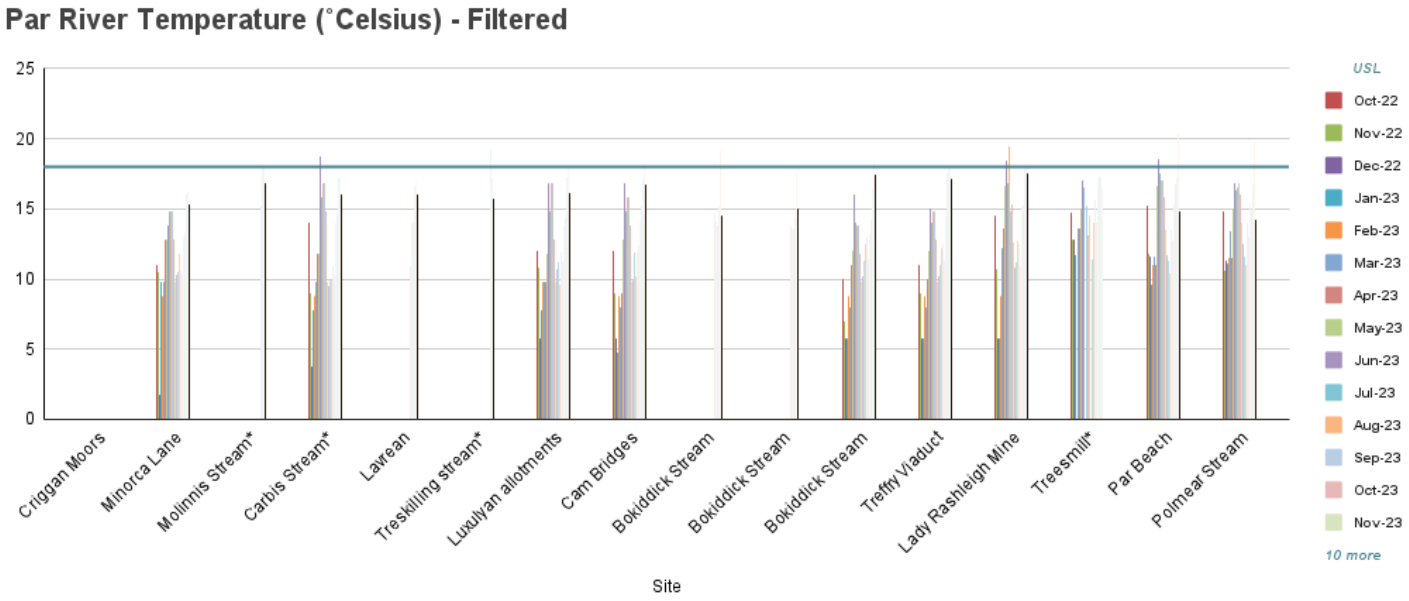
**(a) This month:**




**(b) From 1st October 2023 until now:**



**(c) From 1st October 2022 until now:**

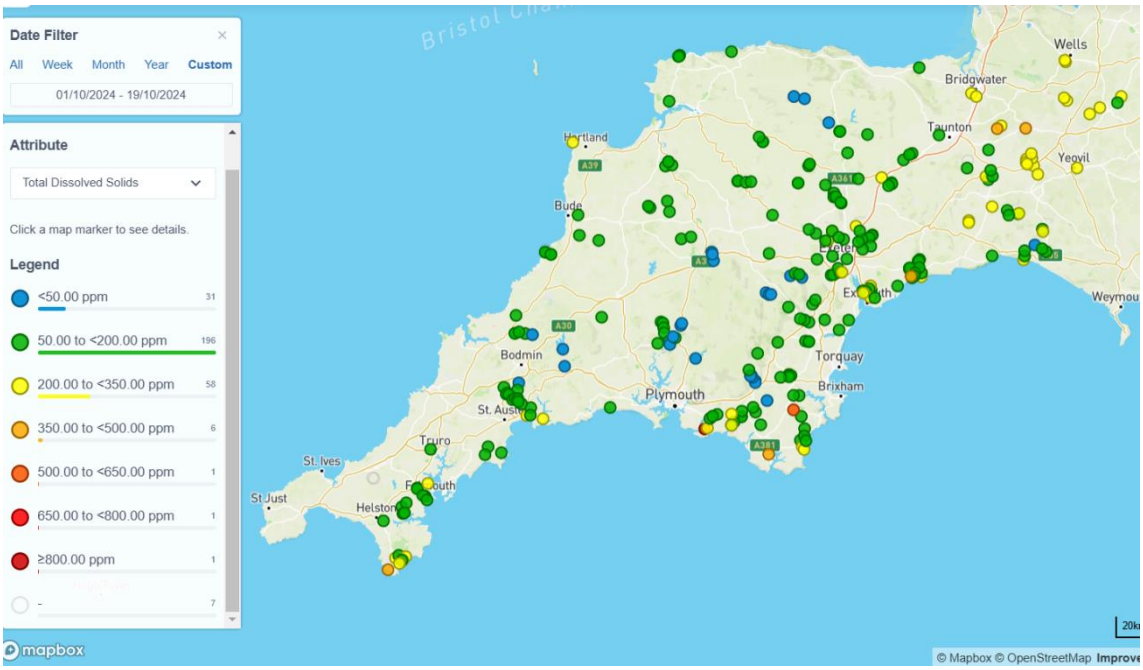


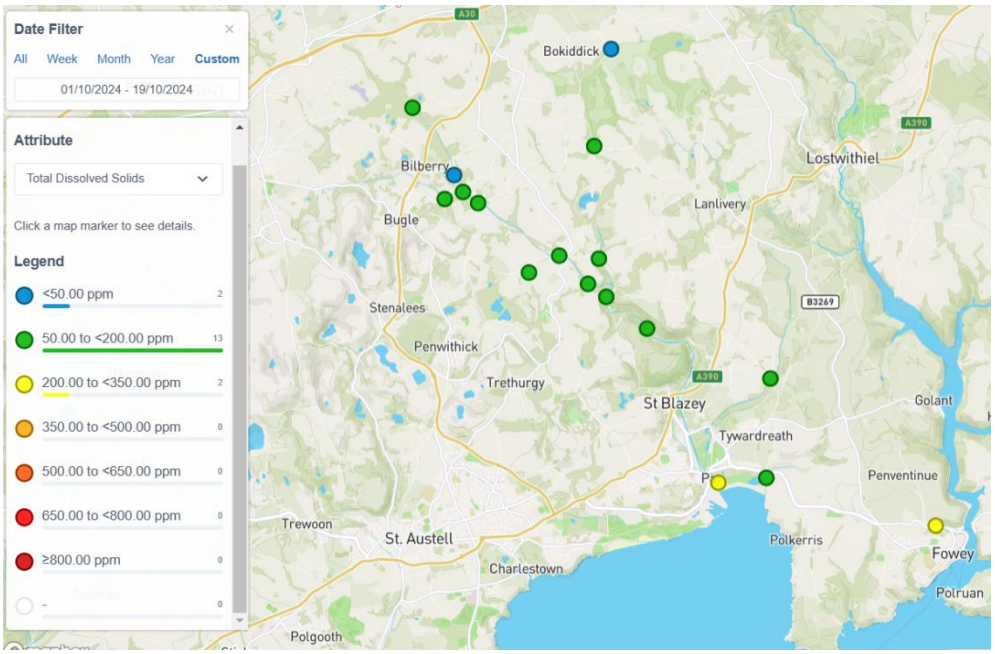

**D. TOTAL DISSOLVED SOLIDS**

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.**



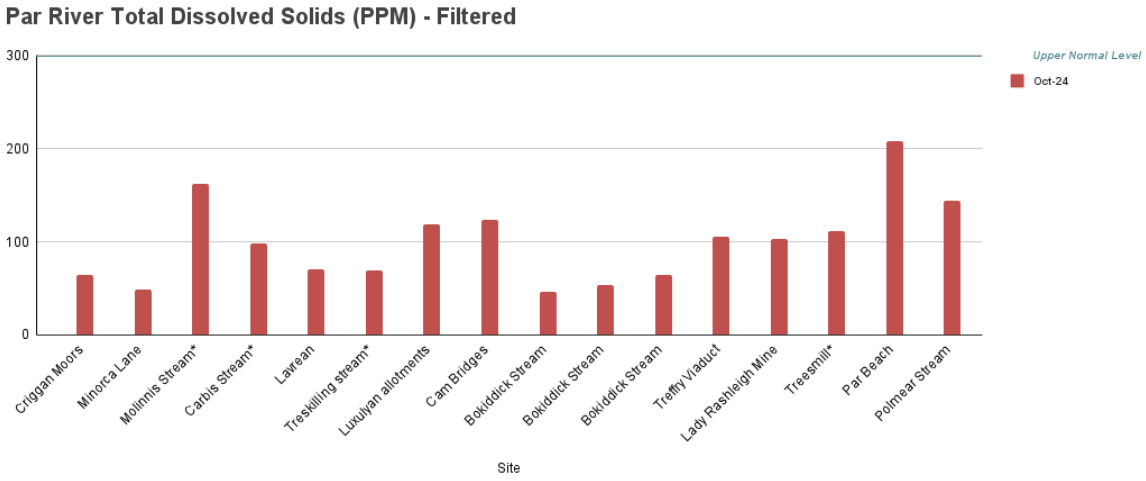



**3. Results October 2024**

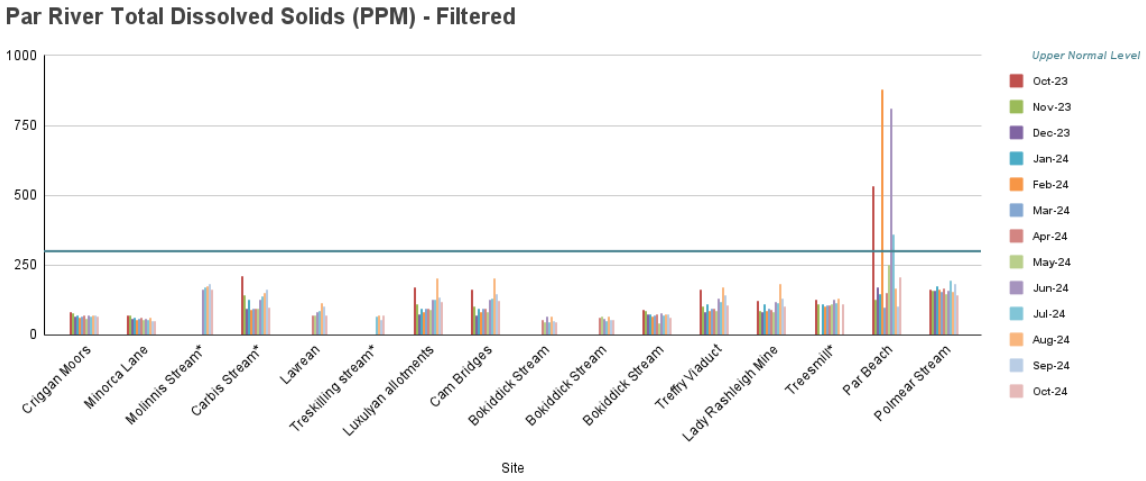
| PAR RIVER/TRIBUTARY | LOCATION | Total Dissolved Solids PPM |
|---|---|---|
| Par | Criggan Moors, Par River, SX 01882 61133 | 65 |
| Par | South of Minorca Lane, Par River, SX 02657 59788 | 49 |
| Secondary tributary | Near Forkandles Farm, Molinnis Stream, SX 02460 59271 | 162 |
| Tributary | Carbis Stream SX 02834 59401 | 98 |
| Par | Lavrean, Par River SX 03134 59164 | 71 |
| Tributary | Treskilling, Treskilling Stream, SX 04107 57726 | 69 |
| Par | Luxulyan allotments, Par River, SX 04732 58045 | 119 |
| Par | Cam Bridges, Par River, SX 05292 57454 | 124 |
| Tributary | Trebell Green, Bokiddick Stream SX 0551960226 | 47 |
| Tributary | Corgee Moor, Bokiddick Stream SX 0593462167 | 54 |
| Tributary | Gatty's Bridge, Bokiddick Stream SX 05531 57953 | 64 |
| Par | Treffry Viaduct, Par River, SX 05650 57179 | 106 |
| Par | Lady Rashleigh Mine, Par River, SX 06451 56509 | 103 |
| Tributary | Treesmill, Tywardreath Stream, SX 08873 55385 | 112 |
| Par | Par Beach slipway, SX 0776 53261 | 208 |
| Tributary | Polmear Stream, Ship Inn, SX 08749 53417 | 144 |

## 4. Graphs

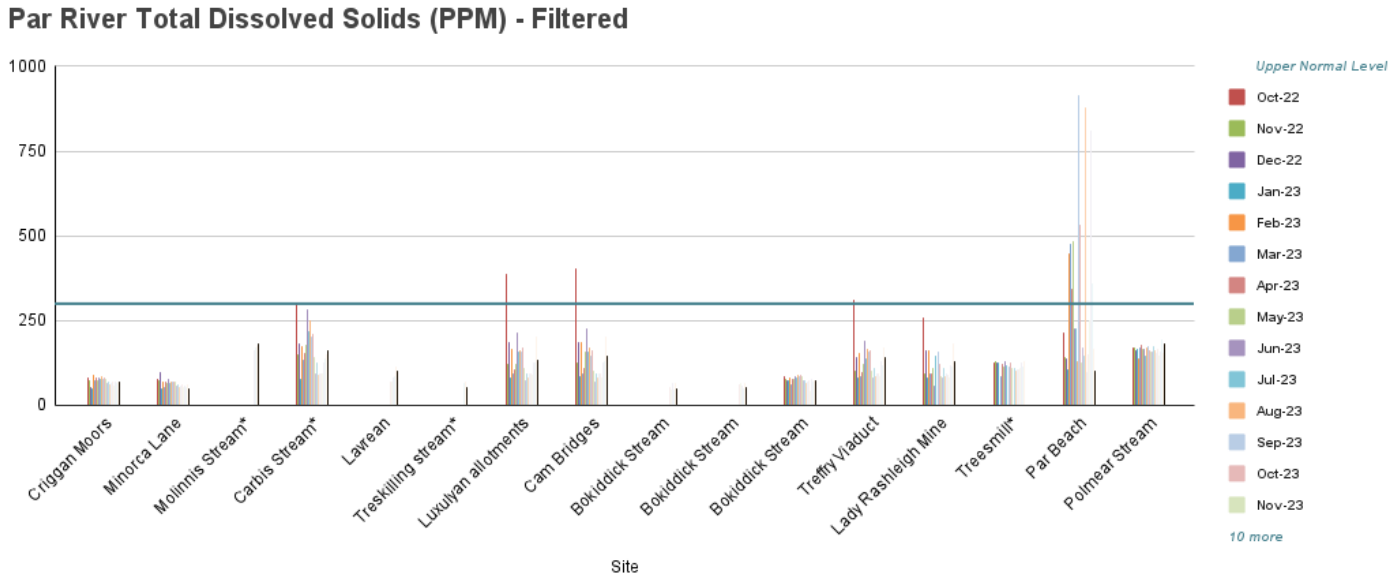
### (a) This month:




### (b) From October 2023 until now:



**(c) From October 2022 until now:**



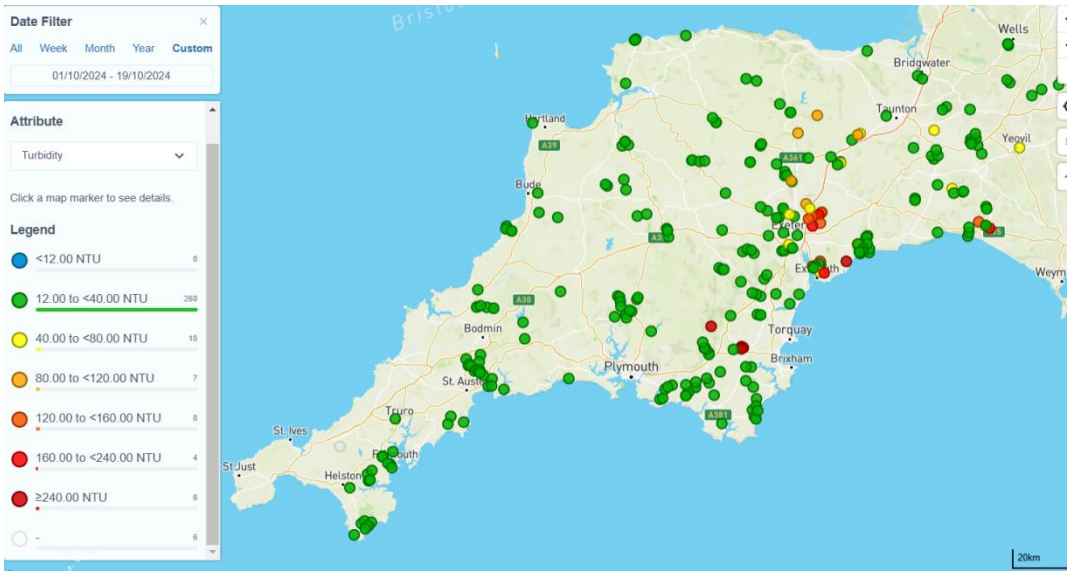

## E. TURBIDITY

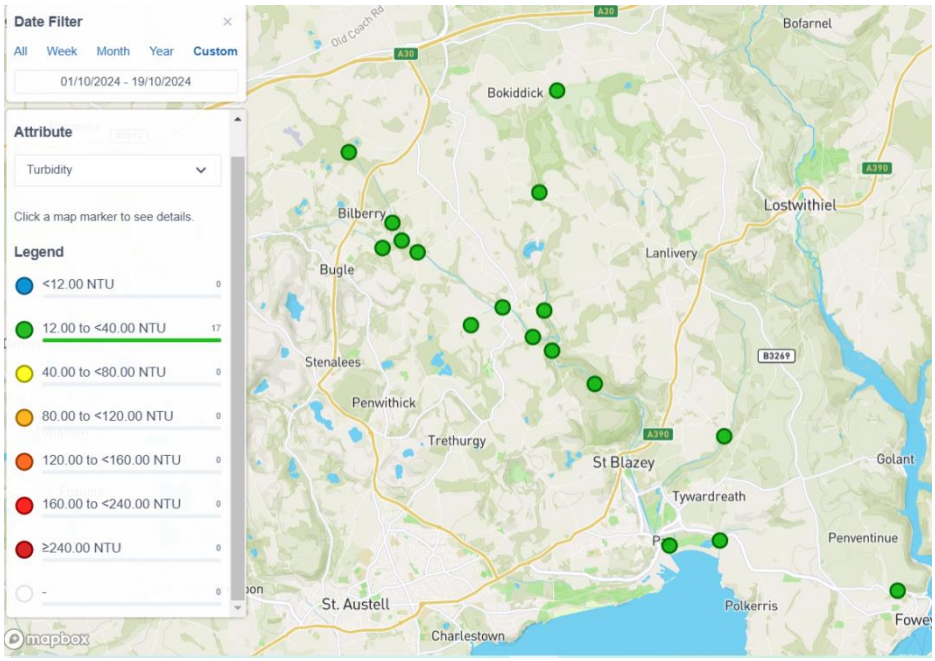
1. This is the WRT explanation of this measure:

*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.* **Geographical comparison.** Where scores are shown as 0, it means that the reading using the Secchi tube was <12. **Source: Cartographer.** Eleven of our results should have blue dots (<12) and five should be green but Cartographer shows them all as green dots.



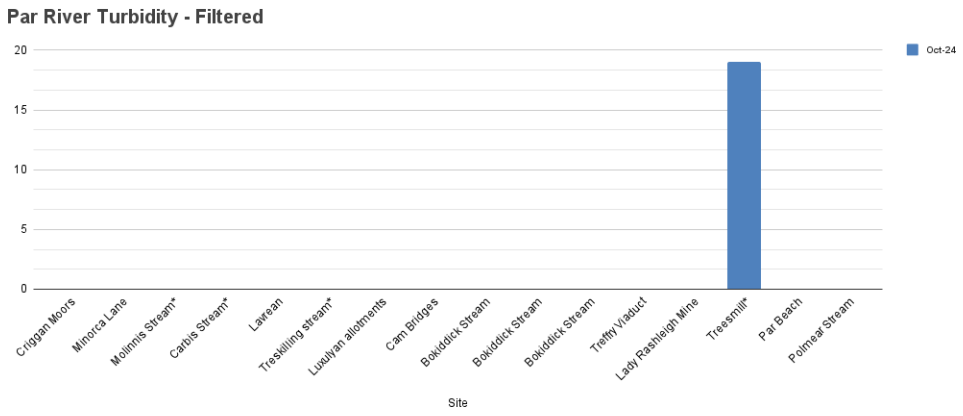



**3. Results October 2024:**

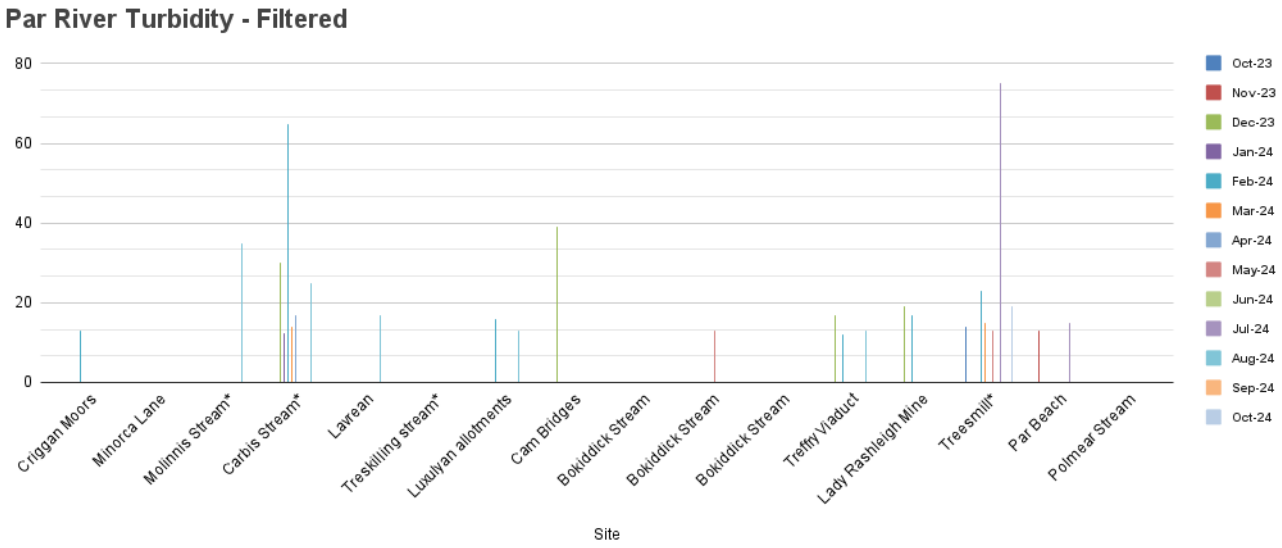
| PAR RIVER/TRIBUTARY | LOCATION | Turbidity (NTU) |
|---|---|---|
| Par | Criggan Moors, Par River, SX 01882 61133 | <12 |
| Par | South of Minorca Lane, Par River, SX 02657 59788 | <12 |
| Secondary tributary | Near Forkandles Farm, Molinnis Stream, SX 02460 59271 | <12 |
| Tributary | Carbis Stream 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 | 19 |
| Par | Par Beach slipway, SX 0776 53261 | <12 |
| Tributary | Polmear Stream, Ship Inn, SX 08749 53417 | <12 |

**4. Graphs**

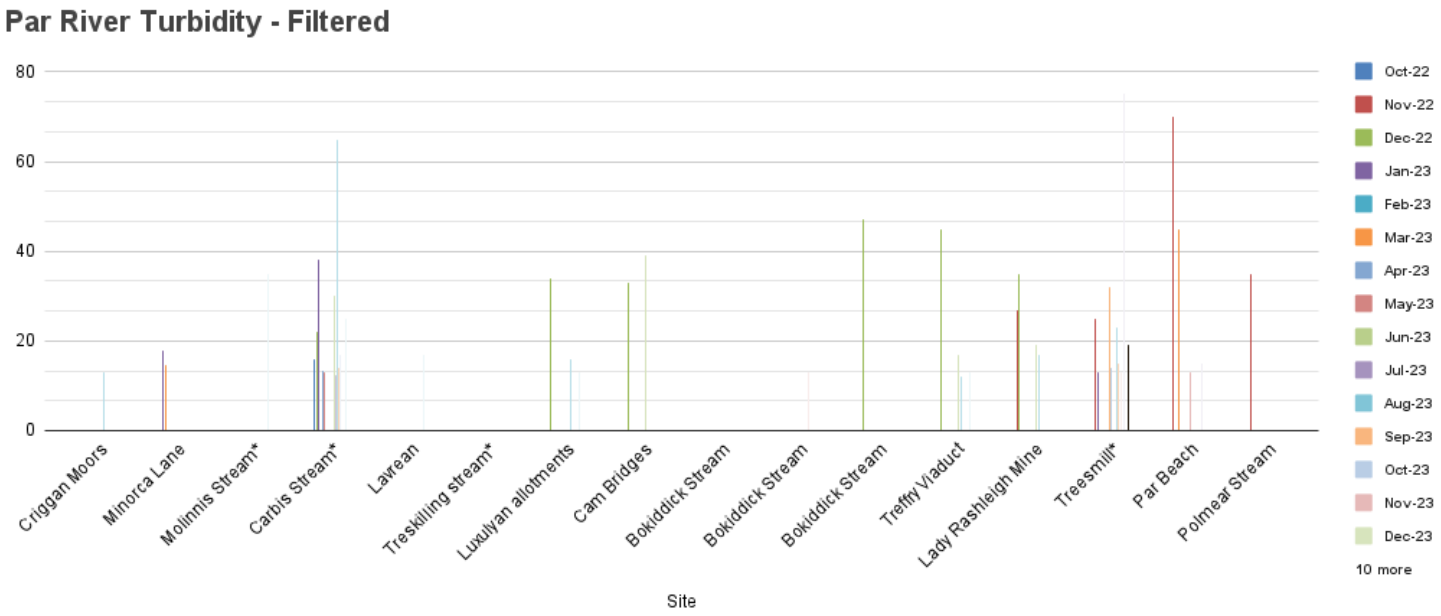
**(a) This month:**



**(b) From 1st October 2023 until now:**




**(c) From 1st October 2022 until now:**



## F. 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.)*

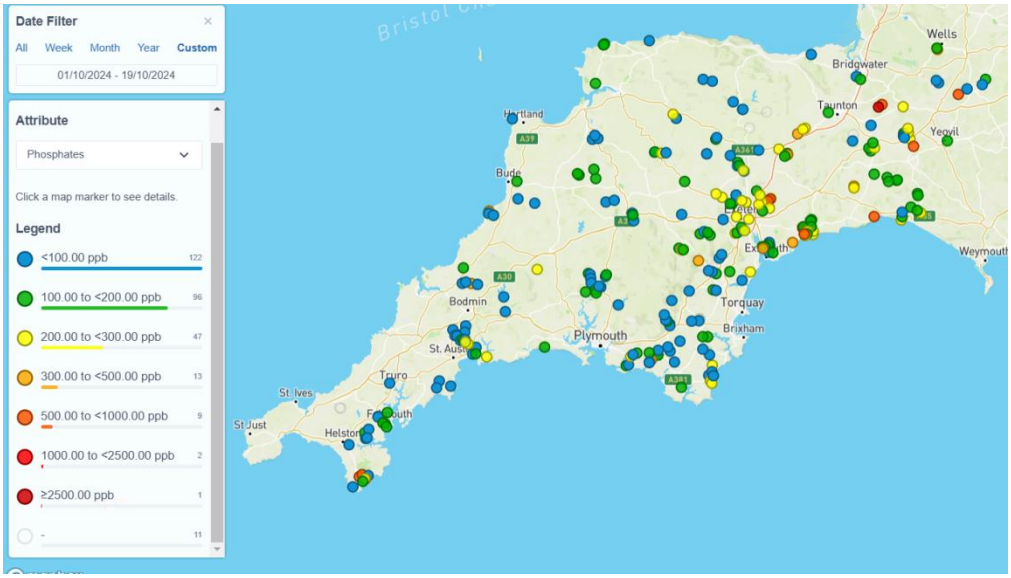
*Ranges on phosphate diagnostic colour chart:*

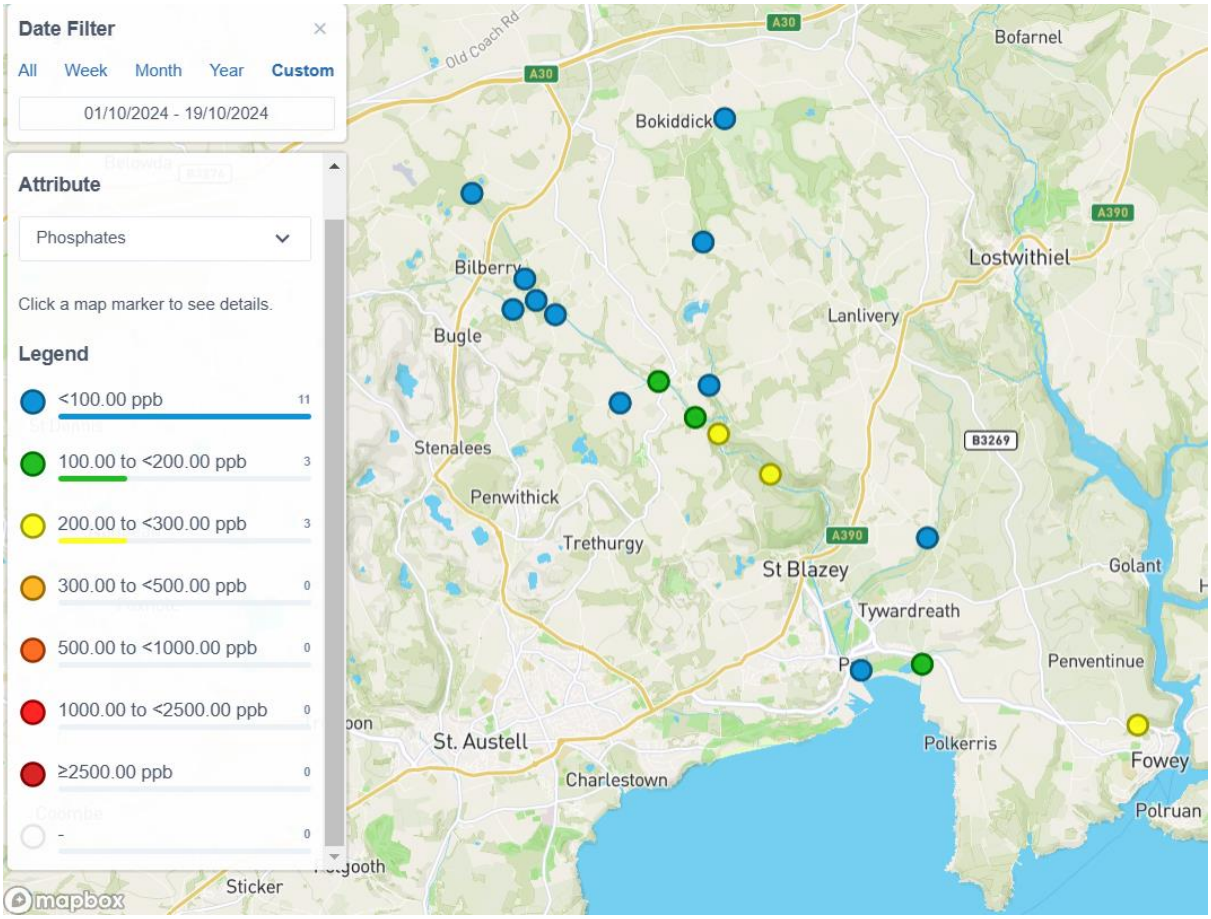
*0 – 100 OK*

*200 – 300 HIGH*

*500 – 2500 – TOO HIGH*

2. **Geographical comparison.** Source: Cartographer




Date Filter
All
Week
Month
Year
Custom
01/10/2024 - 19/10/2024
Attribute
Phosphates
Click a map marker to see details.
Legend
<100.00 ppb 11
100.00 to <200.00 ppb 3
200.00 to <300.00 ppb 3
300.00 to <500.00 ppb 0
500.00 to <1000.00 ppb 0
1000.00 to <2500.00 ppb 0
≥2500.00 ppb 0
- 0
Old Coach Rd
A30
Bofarnel
Bokiddick
A390
Lostwithiel
Bilberry
Lanlivery
Bugle
B3269
Stenalees
Penwithick
Trethurgy
St Blazey
Golant
Tywardreath
Penventinue
St. Austell
Polkerris
Fowey
Charlestown
Polruan
Sticker
mapbox

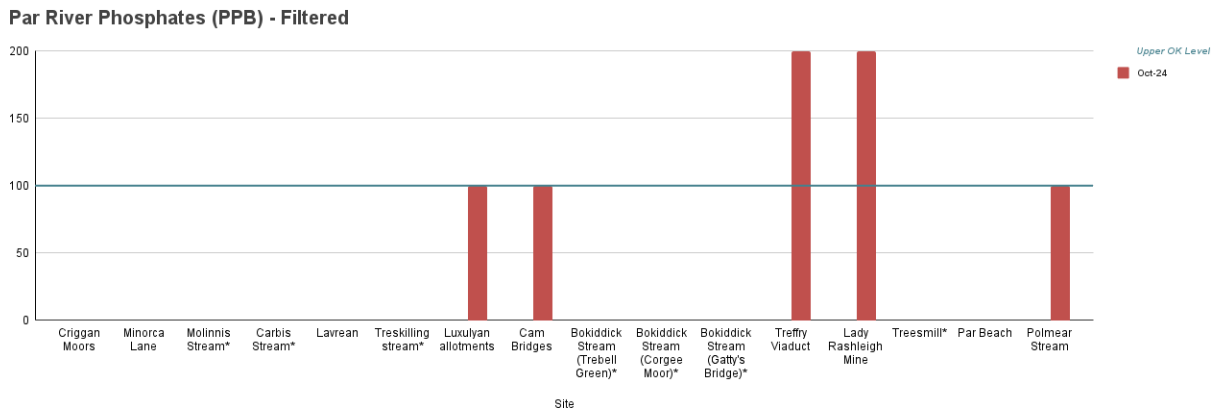
### 3. Results October 2024

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).

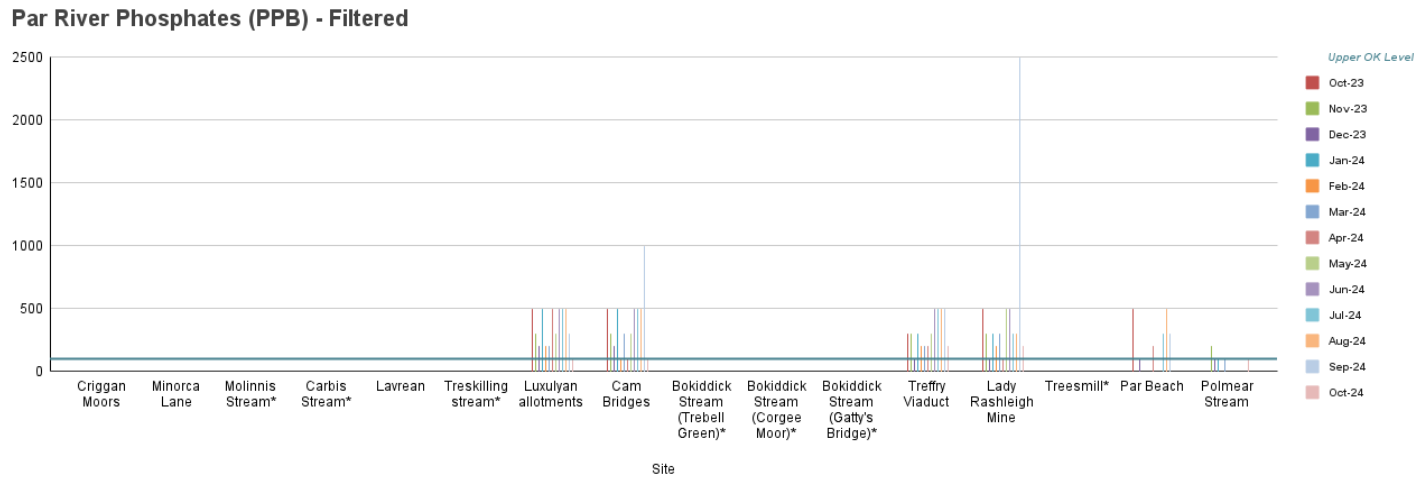
| PAR RIVER/TRIBUTARY | LOCATION | Phosphates PPB |
|---|---|---|
| Par | Criggan Moors, Par River, SX 01882 61133 | **0** |
| Par | South of Minorca Lane, Par River, SX 02657 59788 | **0** |
| Secondary tributary | Near Forkandles Farm, Molinnis Stream, SX 02460 59271 | **0** |
| Tributary | Carbis 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 | **100** |
| Par | Cam Bridges, Par River, SX 05292 57454 | **100** |
| 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 | **100** |

### 4. Graphs

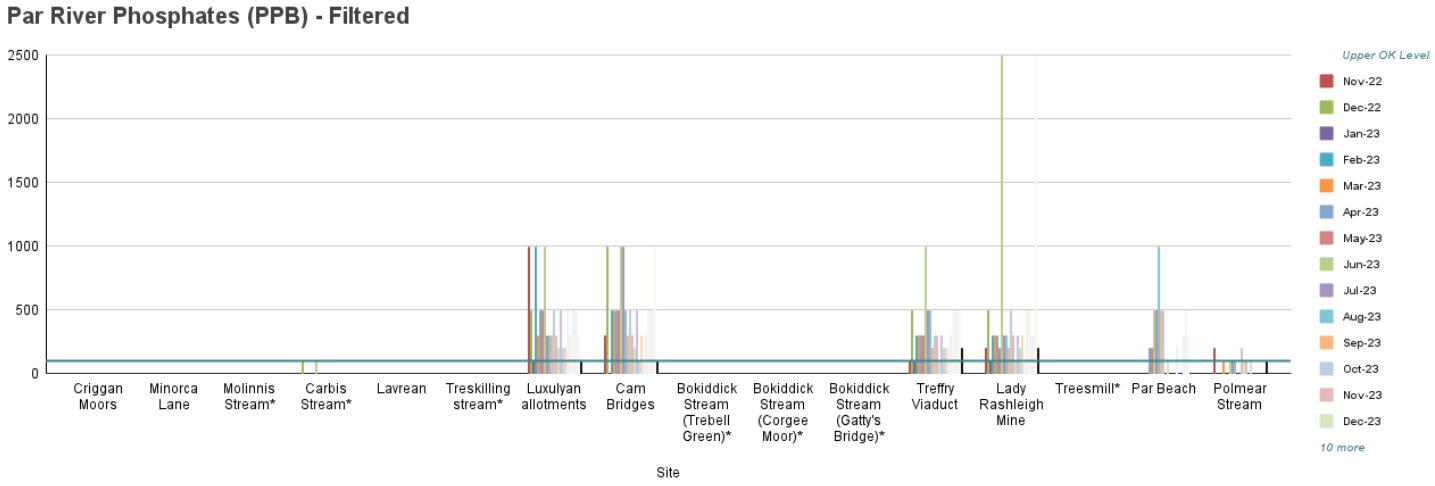
**(a) This month:**



**(b) From 1st October 2023 until now:**



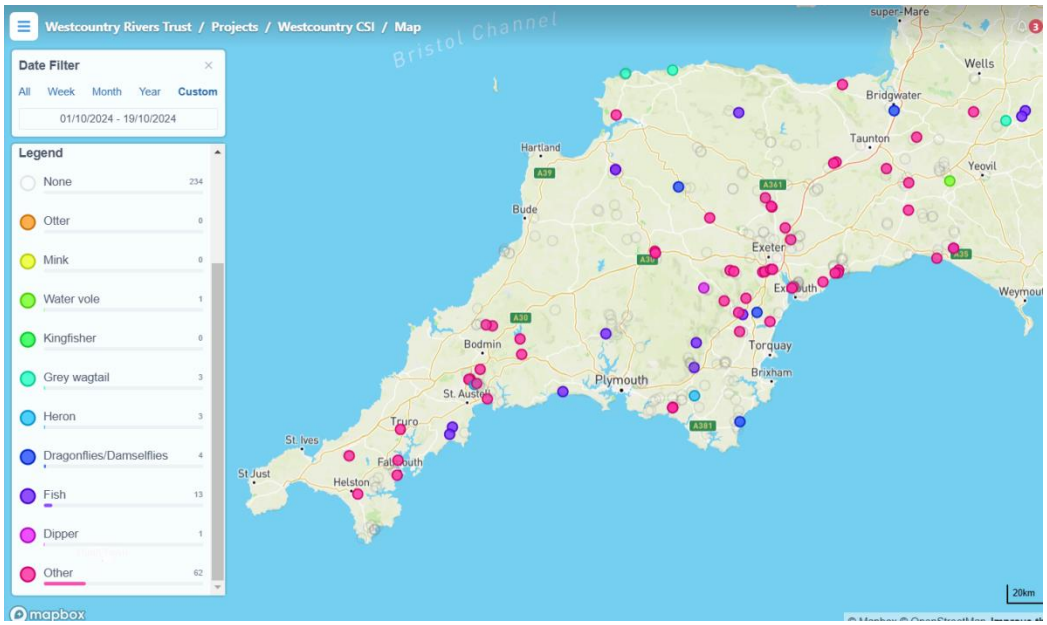

**(c) From 1st October 2022 until now:**

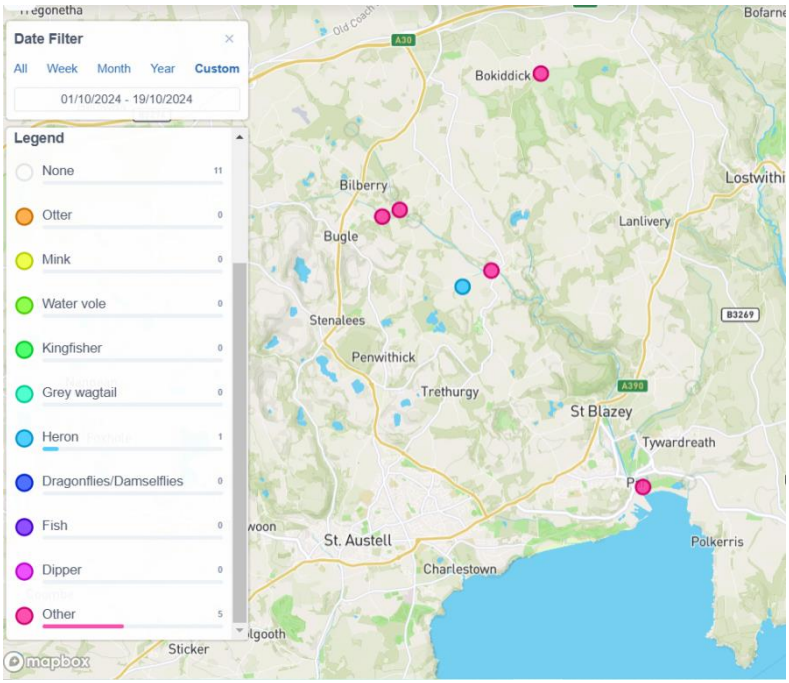


## G. WILDLIFE & INVASIVE PLANTS

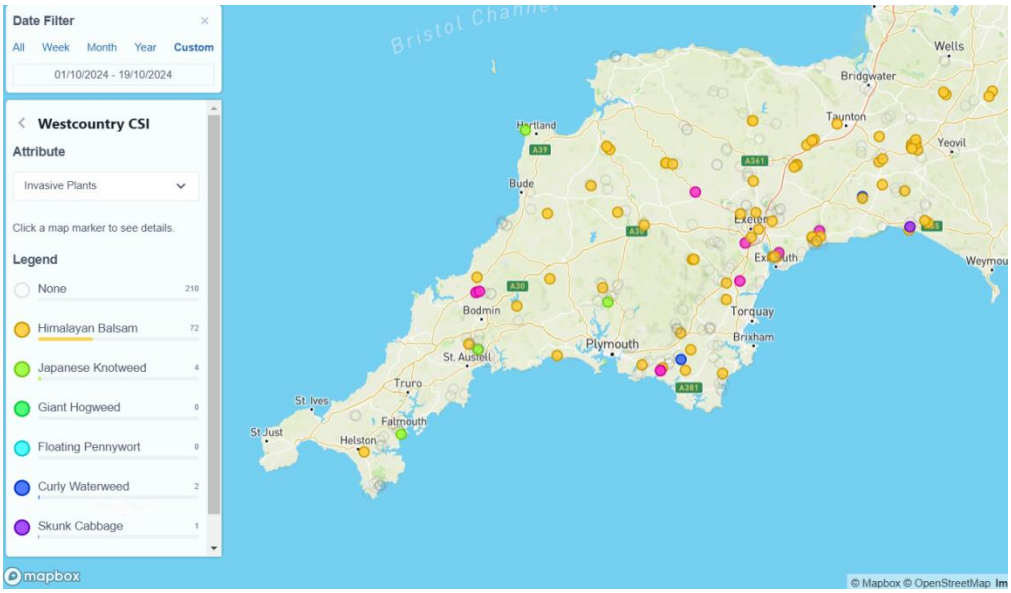
### (a) Wildlife maps

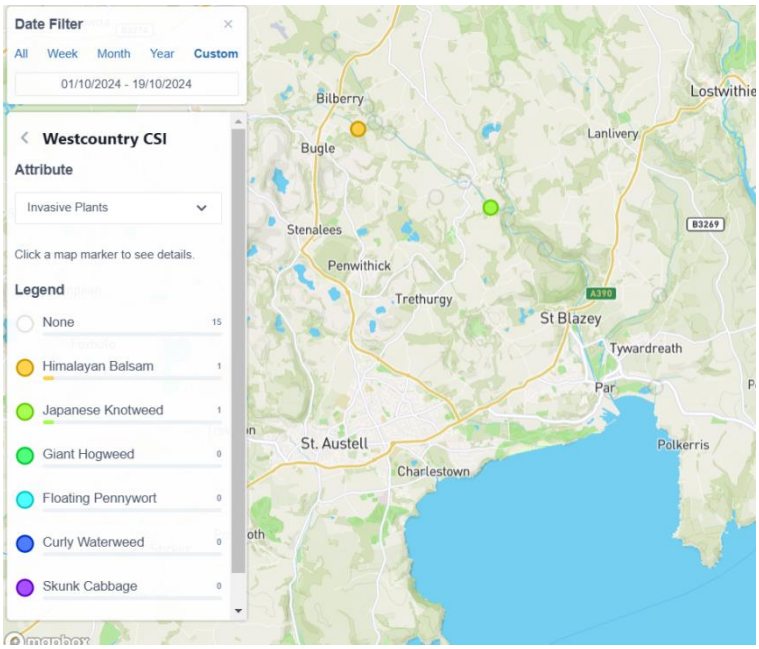
Evidence of otters is found nearly every month, but frequently it is not found at our monitoring points and when it is it will be entered under 'Other' because live sightings are extremely rare. However, in October, a combination of high river levels and a lack of time meant that no evidence was found. This does not mean that otters were not present.



## (b) Invasive plants maps



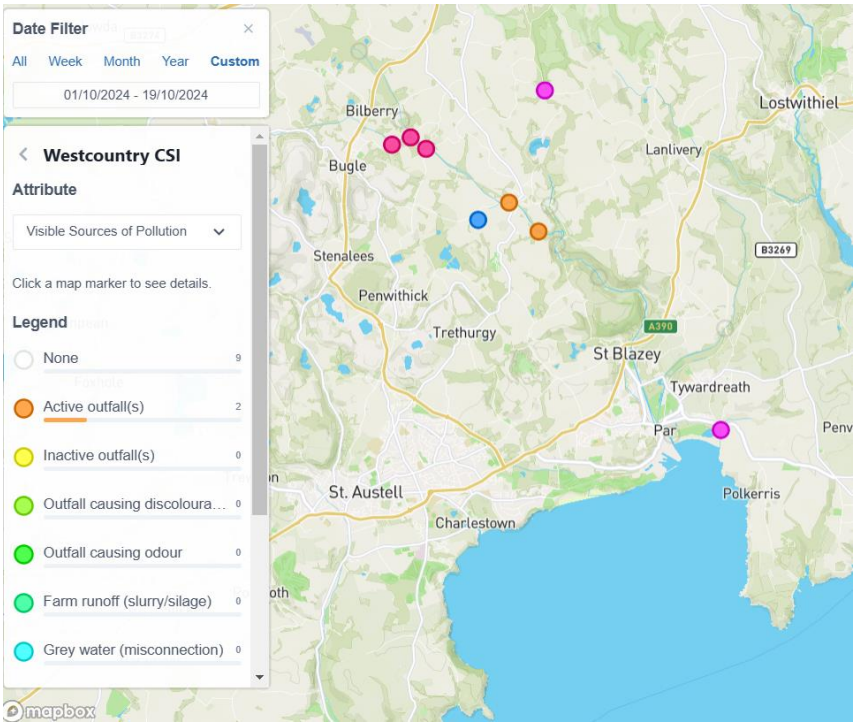
**(c) Wildlife & Invasive Plants sightings at the monitoring points included:**

| LOCATION | WILDLIFE NOTED | INVASIVE PLANTS NOTED |
|---|---|---|
| Criggan Moors, SX 01882 61133 | None | None |
| South of Minorca Lane, Par River, SX 02657 59788 | None | None |
| Forkandles Farm, Molinnis Stream, SX 02460 59271 | Deer tracks | Japanese Knotweed |
| Carbis Stream SX 02834 59401 | None | None |
| Lavrean, Par River SX 03134 59164 | None | None |
| Treskilling, Treskilling Stream, SX 04107 57726 | Heron (downstream) | None |
| Luxulyan allotments, Par River, SX 04732 58045 | Cormorant | None |
| Cam Bridges, Par River, SX 05292 57454 | None | Japanese Knotweed |
| Trebell Green, Bokiddick Stream SX 0551960226 | Lake created by beaver dam | None |
| Corgee Moor, Bokiddick Stream SX 0593462167 | None | 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 | None | None |
| Treesmill, Tywardreath Stream, SX 08873 55385 | None | None |
| Par Beach slipway, SX 0776 53261 | Swans | None |
| Polmear Stream, Ship Inn, SX 08749 53417 | None | None |

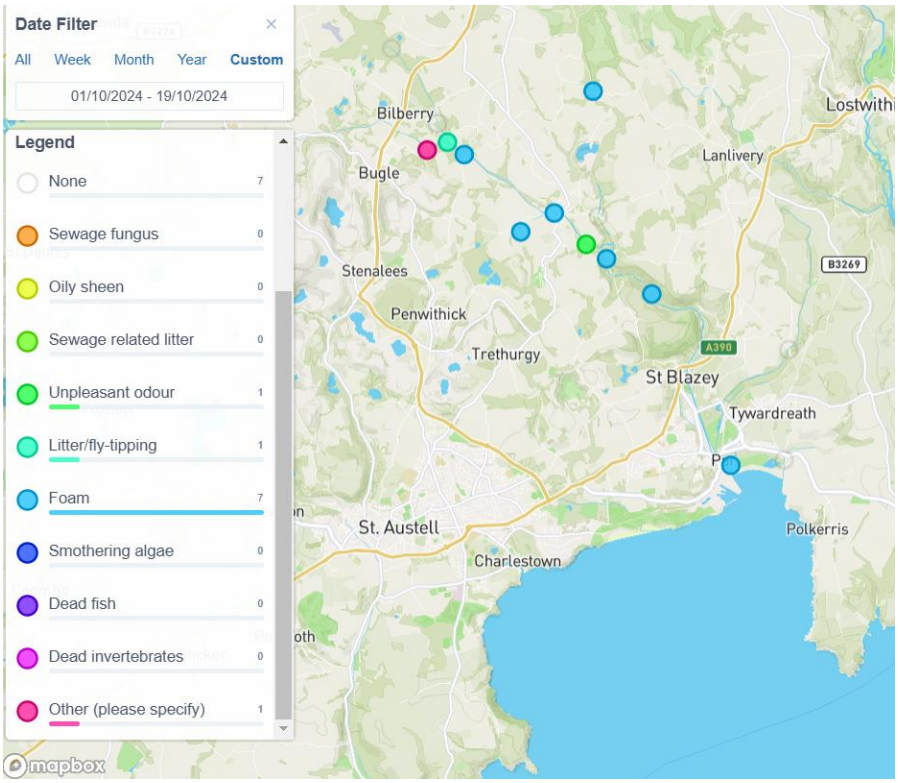

**Heron on the Treskilling Stream (to the left of the brown patch).**

## H. POLLUTION SOURCES AND EVIDENCE

### 1. Visible sources of pollution:



## 2. **Recent evidence of pollution**





**The confluence of the Par River (left) and Carbis Stream (right) was marked by a grey tinge in the latter caused by china clay, either worn from the banks or, less likely, a recent discharge.**

**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 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, 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.

**Roger Smith, 19th November 2024**