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.

AUGUST 2024

Pond skaters (Gerris lacustris) on the Upper Par River near Lavrean.

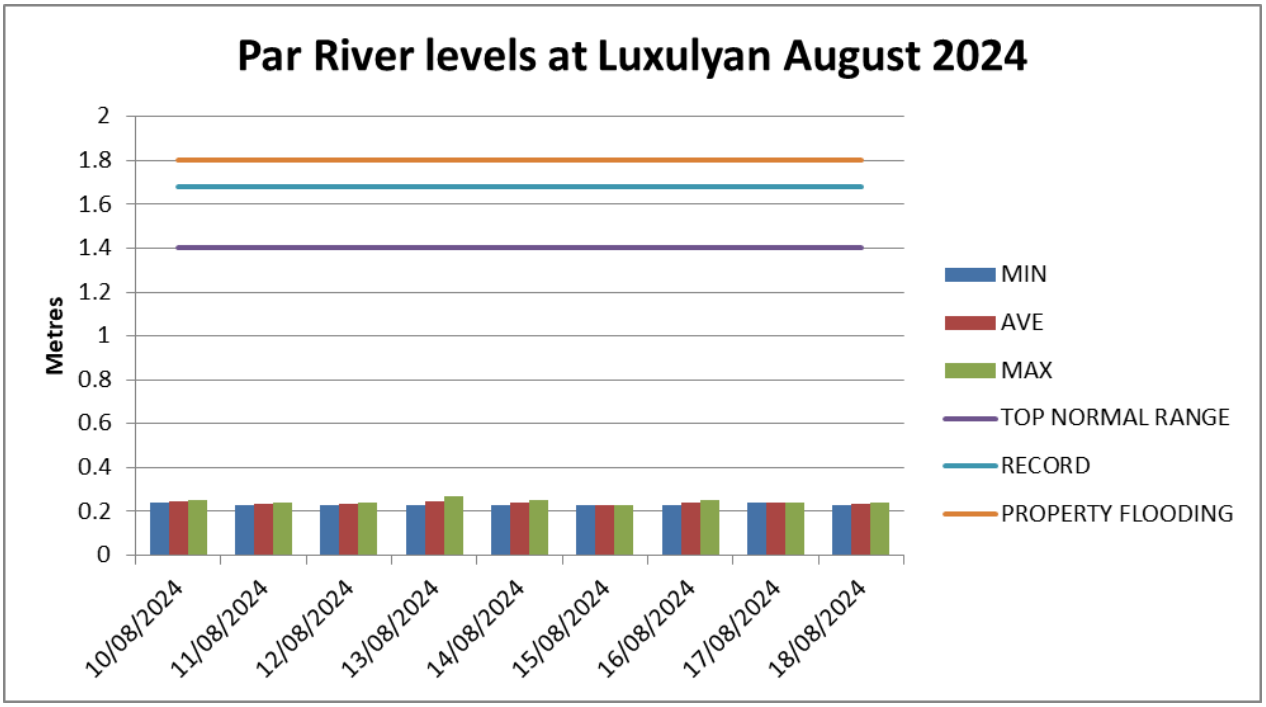
CONTENT	PAGES

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

1. We sampled at 16 locations. The red highlighting shows points of concern.

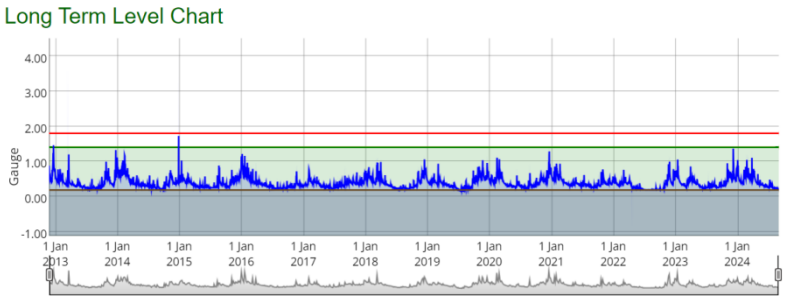
CRITERIA	UPPER PAR (UPSTREAM OF CONFLUENCE WITH BOKIDDICK STREAM NEAR BLACK HILL CAR PARK) 5 TESTING LOCATIONS	LOWER PAR (FROM CONFLUENCE WITH BOKIDDICK STREAM TO SEA) 3 TESTING LOCATIONS	TRIBUTARIES OF UPPER PAR (CARBIS STREAM, MOLINNIS STREAM, TRESKILLING STREAM, BOKIDDICK STREAM) 6 TESTING LOCATIONS	TRIBUTARY OF LOWER PAR (POLMEAR STREAM) 2 TESTING LOCATIONS
TEMPERATURE ˚ CELSIUS (SHOULD NOT EXCEED 18˚ CELSIUS)	Mean 17.08 Median 16.9 Min 16.2 Max **18.2**	Mean **18.8** Median 18 Min 18 Max **20.4**	Mean 17.88 Median 17.75 Min 17.1 Max **19.2**	Mean **18.15** Median **18.15** Min 16.5 Max **19.8**
TOTAL DISSOLVED SOLIDS PPM (SHOULD NOT EXCEED 300 PPM)	Mean 130.8 Median 114 Min 63 Max 205	Mean 173.66 Median 169 Min 168 Max 184	Mean 101.6 Median 72.5 Min 66 Max 176	Mean 142 Median 142 Min 130 Max 154
TURBIDITY (SHOULD BE <12 ON SECCHI TUBE. FOR AVERAGING ANY READING <12 IS COUNTED AS 0)	Mean 6 Median 0 Min 0 Max 17	Mean 4.3 Median 0 Min 0 Max 13	Mean 10 Median 0 Min 0 Max 35	Mean 0 Median 0 Min 0 Max 0
PHOSPHATES PPB (SHOULD NOT EXCEED 100 PPB)	Mean **200** Median 0 Min 0 Max **500**	Mean **433.3** Median **500** Min **300** Max **500**	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)	No riverfly monitoring took place this month.			
WILDLIFE EVIDENCE	Dragonflies, pond skaters, otter spraint & anal jelly,	Dragonfly	Pond skaters, dragonfly	None
INVASIVE PLANTS	Hemlock Water Dropwort, Himalayan Balsam, Japanese Knotweed	Hemlock Water Dropwort	Hemlock Water Dropwort, Himalayan Balsam, Japanese Knotweed	Himalayan Balsam
EVIDENCE OF POLLUTION	Foam	Foam, smell	China clay	Surface scum

2. **Par River levels at Luxulyan preceding and during surveys.** These are available here: https://check-for-flooding.service.gov.uk/station/3159). The following graph uses data recorded at this website: https://riverlevels.uk/par-river-luxulyan



How levels here 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



Darker blue shaded areas on long term data indicate maximum and minimum levels for the date (you may need to zoom in closer to see them).

Long term data may have gaps where the API data was not available.

Source: https://riverlevels.uk/par-river-luxulyan .

B. KEY POINTS

1. Positive signs

(a) Although there was a limited search, evidence for the presence of otters was found on the Upper Par at Luxulyan allotments.

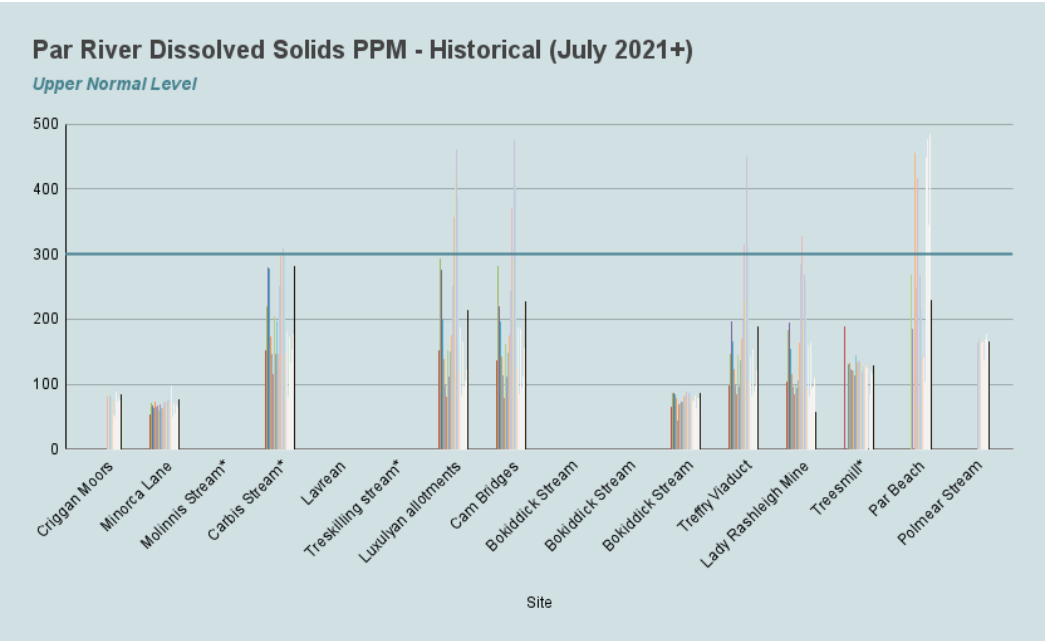
(b) There were other signs of wildlife, such as dragonflies.

2. Points of concern

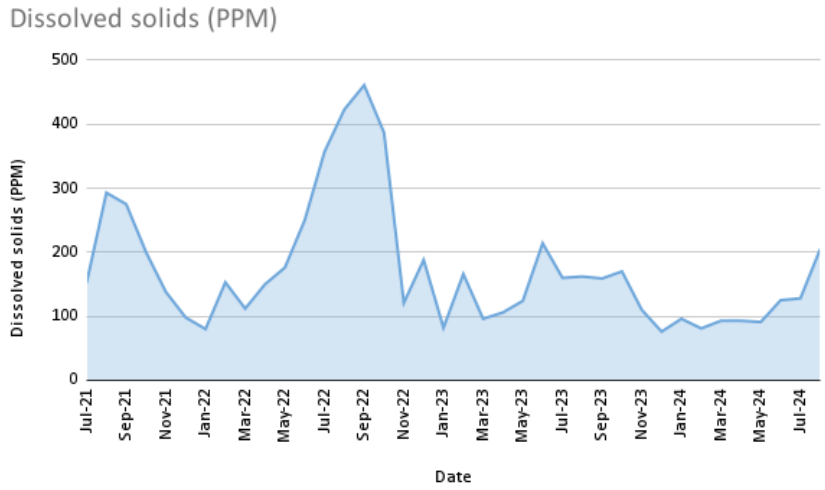
(a) Unsurprisingly, phosphate levels were 'Too High' (WRT classification) on the lower section of the Upper Par and on the Lower Par. No evidence of phosphates was found upstream of St Austell North STW.

(b) Foam and a smell were detected on the lower section of the Upper Par and on the Lower Par. The water was not discoloured but there were suspicions of a slight opacity, although this may be subjective. The water on the Molinnis and Carbis Streams showed china clay pollution. Rainfall preceding the monitoring was neither heavy nor prolonged and the river levels were not high. Presumably, historically deposited china clay can either be washed from the banks and bed, more likely in periods of high rainfall and elevated river levels, or result from recent discharges.

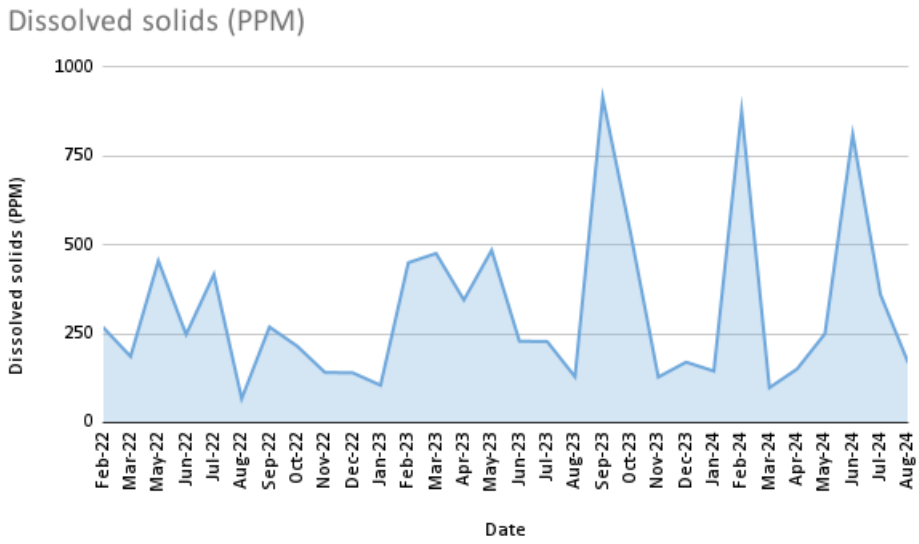
(c) Scores for Total Dissolved Solids and Turbidity were higher than in July, although not necessarily of concern. The TDS scores were below the 300 PPM that would raise concern (this is advice received as a personal communication) and were below the highest scores we have observed. It may be that higher TDS is more likely in the summer months, possibly because the volume of water is lower, increasing the concentration of the solids. This graph shows the TDS scores at our monitoring sites but it doesn't show clearly the times of year.



The next graphs show TDS at 2 sites. The first is at Luxulyan allotments, where TDS appears to be higher in summer months:

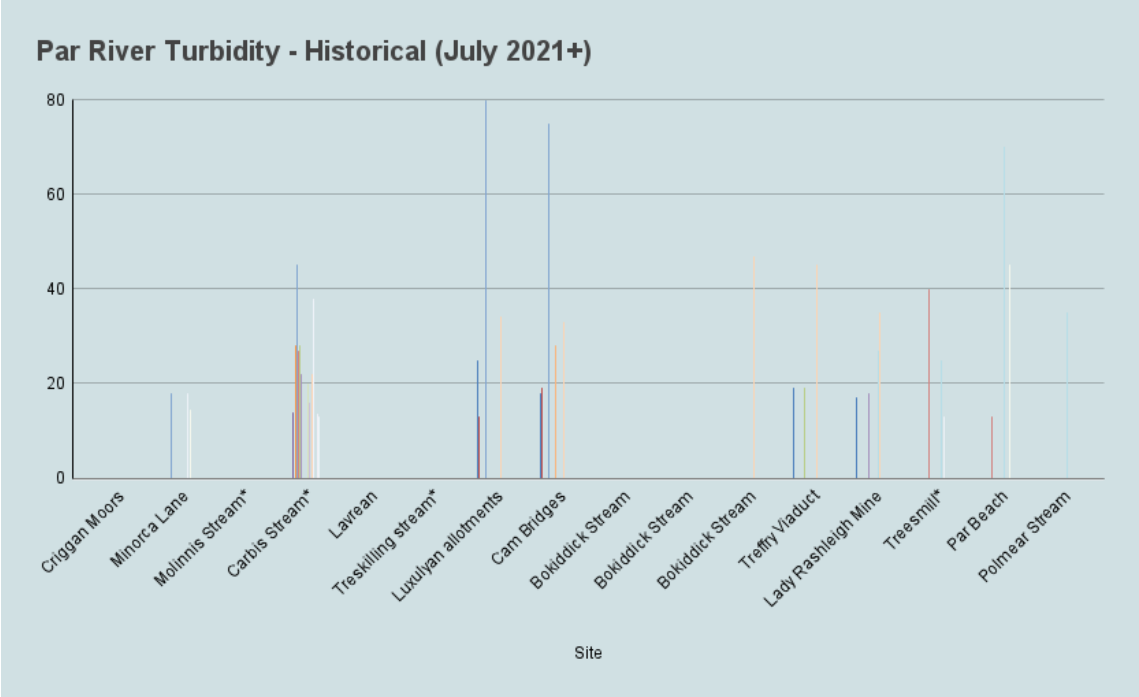


However at Par Beach the position is less clear-cut:

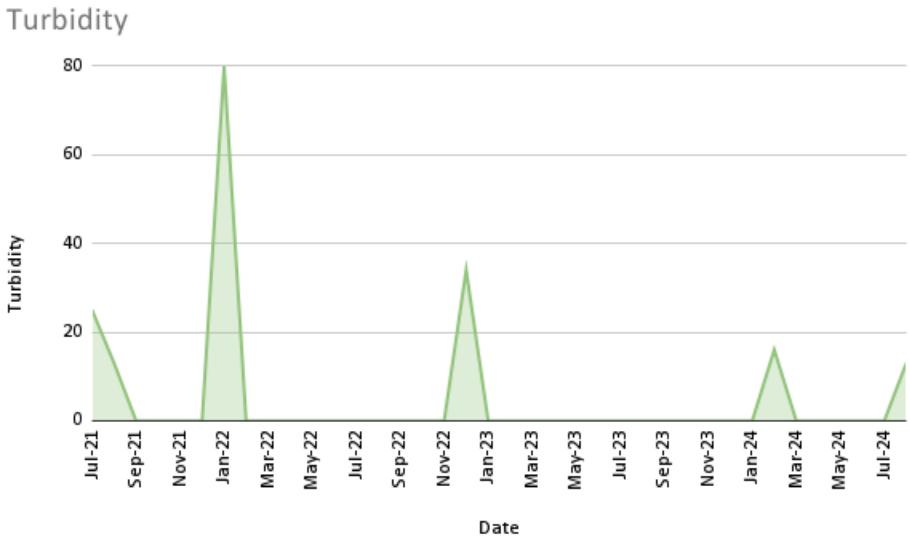


It is rare for us to record Turbidity values >12 (NTU) but we did at 5 of the 16 sites in August. At some sites a score of <12 was only just reached.

This graph doesn't allow for dates to be observed but it does show that Turbidity scores exceeding 12 NTU are more common in the main Par River, especially from the allotments downstream, than on most tributaries, with the exception of the Carbis and Treesmill Streams (as yet, there is insufficient evidence for the Molinnis Stream).



If we take Luxulyan allotments on the Upper Par as an example, our data shows 5 higher readings, 3 in the winter and 2 in the summer. Winter rains and turbulent flows might be expected to increase Turbidity but positive summer readings are more of a surprise.



(d) At 5 of the 16 locations water temperature exceeded 18˚ Celsius.

3. Areas for further research

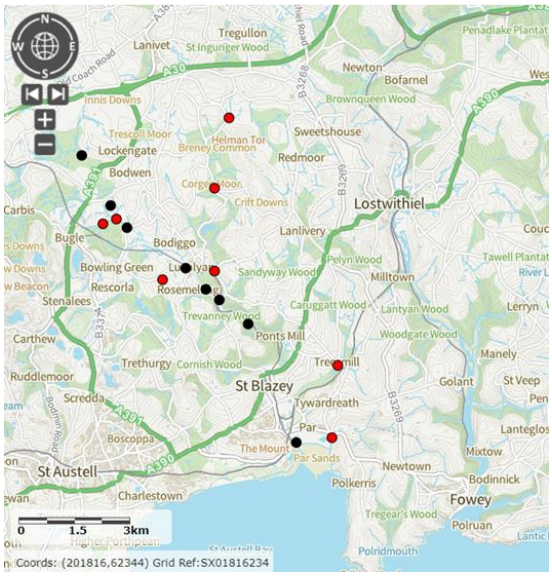
(a) As indicated in the Points of Concern, as volunteers we need to acquire a greater understanding of higher TDS and Turbidity, both the causes and consequences.

(b) Public attention understandably focuses on the impact of the water industry (and to a lesser extent, farming) on river health, but it would be naïve to see these as the only contributory factors. The more detailed work carried out by experts by the EA, WRT and others show a range of contaminants, some current, others historical, that we need to understand. Two examples are the long-term impact of tin streaming (with some metal mining) and the china clay industry on the Par River and the effect of 19th century large-scale deep mining for metals on the Treesmill Stream.

(c) As a group, we are getting better at recording wildlife. This can skew records if data is seen as showing an increase in wildlife, which is not necessarily the case. There is still great scope for better observation and recording, as well as finding out more about the research carried out by the professionals. For example, an electro-fishing survey on the Par River was due this summer and it would be very helpful to see the findings.

B. AUGUST 2024 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**	14/8/2024 9.10	CSI sample & Cartographer record.	Roger Smith
South of Minorca Lane, Par River, SX02668 59747	**PAR**	14/8/2024 8:30	CSI sampling. Cartographer record.	Roger Smith
Near Forkandles farm, Molinnis Stream, SX 02460 59271	**SECONDARY TRIBUTARY (OF CARBIS STREAM)**	14/8/2024 10:20	CSI sample & Cartographer record.	Roger Smith
Carbis Stream SX 02834 59401	**TRIBUTARY**	14/8/2024 10	CSI sampling. Cartographer record.	Roger Smith
Lavrean, Par River SX 03134 59164	**PAR**	14/8/2024 10:40	CSI sampling. Cartographer record.	Roger Smith
Treskilling, Treskilling Stream, SX 04107 57726	**TRIBUTARY**	14/8/2024 11:20	CSI sampling. Cartographer record.	Roger Smith
Luxulyan allotments, Par River, SX 04732 58045	**PAR**	14/8/2024 11:40	CSI sampling. Cartographer record.	Roger Smith
Cam Bridges, Par River, SX 05292 57454	**PAR**	14/8/2024 13:30	CSI sampling. Cartographer record.	Roger Smith
Trebell Green, Bokiddick Stream SX 0551960226	**TRIBUTARY**	10/8/2024 16:10	CSI sampling. Cartographer record.	Roger Smith
Corgee Moor, Bokiddick Stream SX 0593462167	**TRIBUTARY**	14/8/2024 17:00	CSI sampling. Cartographer record.	Roger Smith
Gatty's Bridge, Bokiddick Stream SX 05531 57953	**TRIBUTARY**	14/8/2024 15:55	CSI sampling. Cartographer record.	Joan Farmer
Treffry Viaduct, Par River, SX 05650 57179	**PAR**	14/8/2024 15:15	CSI sampling. Cartographer record.	Joan Farmer
Lady Rashleigh Mine, Par River, SX 06451 56509	**PAR**	14/8/2024 14:10	CSI sampling. Cartographer record.	Veronica Jones, Joan Farmer, Roger Smith
Treesmill, Tywardreath Stream, SX 08873 55385	**TRIBUTARY**	17/7/2024 12:55	CSI sampling. Cartographer record.	Maggie Tagney
Par Beach slipway, SX 0776 53261	**PAR**	17/7/2024 23:00	CSI sampling. Cartographer record.	Simon Tagney
Polmear Stream, Ship Inn SX 08749 53417	**TRIBUTARY**	17/7/2024 16:40	CSI sampling. Cartographer record.	Brian Harrisson

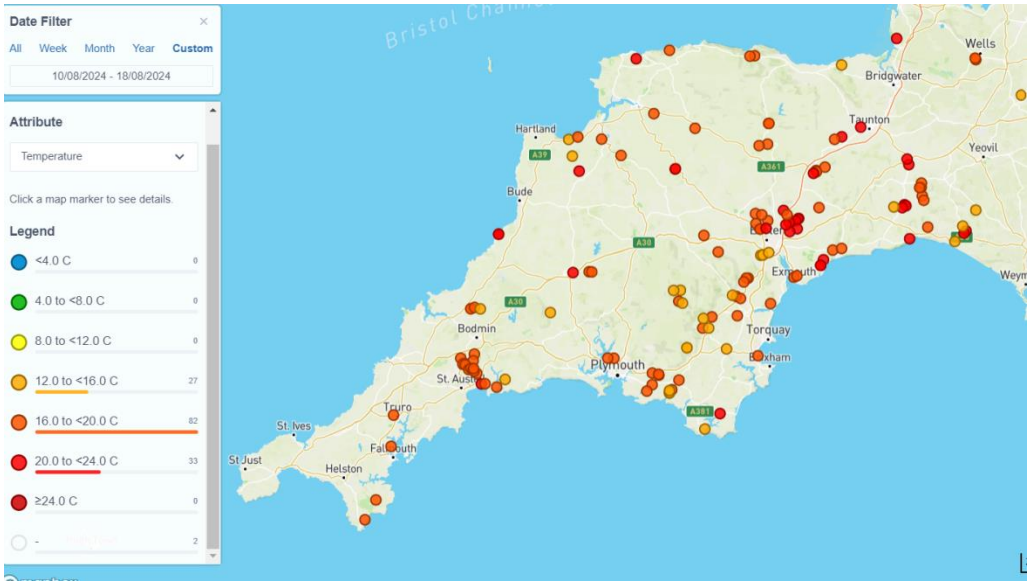
The times have been included in case that explains some of the variations in water temperature.

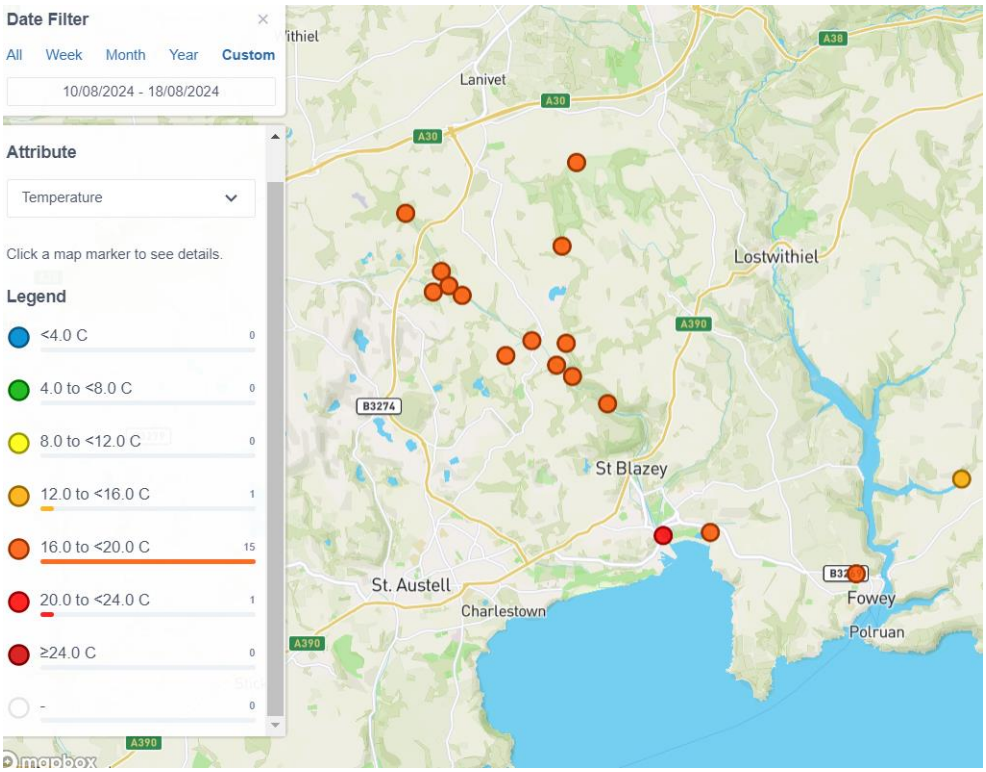
C. TEMPERATURE

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 August 2024

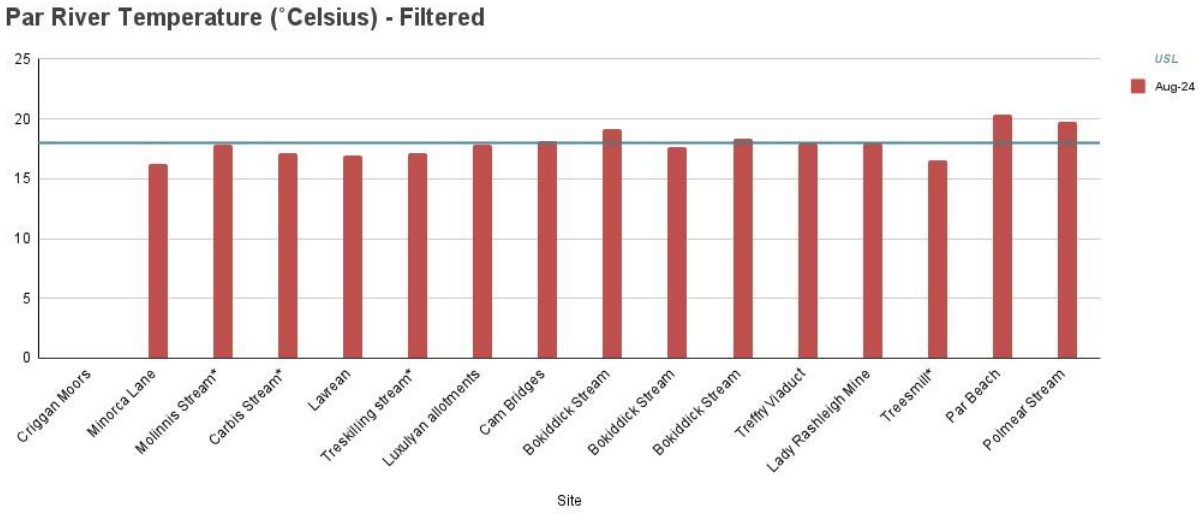
PAR RIVER/TRIBUTARY	LOCATION	Temperature ˚Celsius
Par	Criggan Moors, Par River, SX 01882 61133	16.2
Par	South of Minorca Lane, Par River, SX 02657 59788	16.2
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271	17.9
Tributary	Carbis Stream SX 02834 59401	17.1
Par	Lavrean, Par River SX 03134 59164	16.9
Tributary	Treskilling, Treskilling Stream, SX 04107 57726	17.1
Par	Luxulyan allotments, Par River, SX 04732 58045	17.9
Par	Cam Bridges, Par River, SX 05292 57454	**18.2**
Tributary	Trebell Green, Bokiddick Stream SX 0551960226	**19.2**
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167	17.6
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953	**18.4**
Par	Treffry Viaduct, Par River, SX 05650 57179	18
Par	Lady Rashleigh Mine, Par River, SX 06451 56509	18
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385	16.5
Par	Par Beach slipway, SX 0776 53261	**20.4**
Tributary	Polmear Stream, Ship Inn, SX 08749 53417	**19.8**

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.

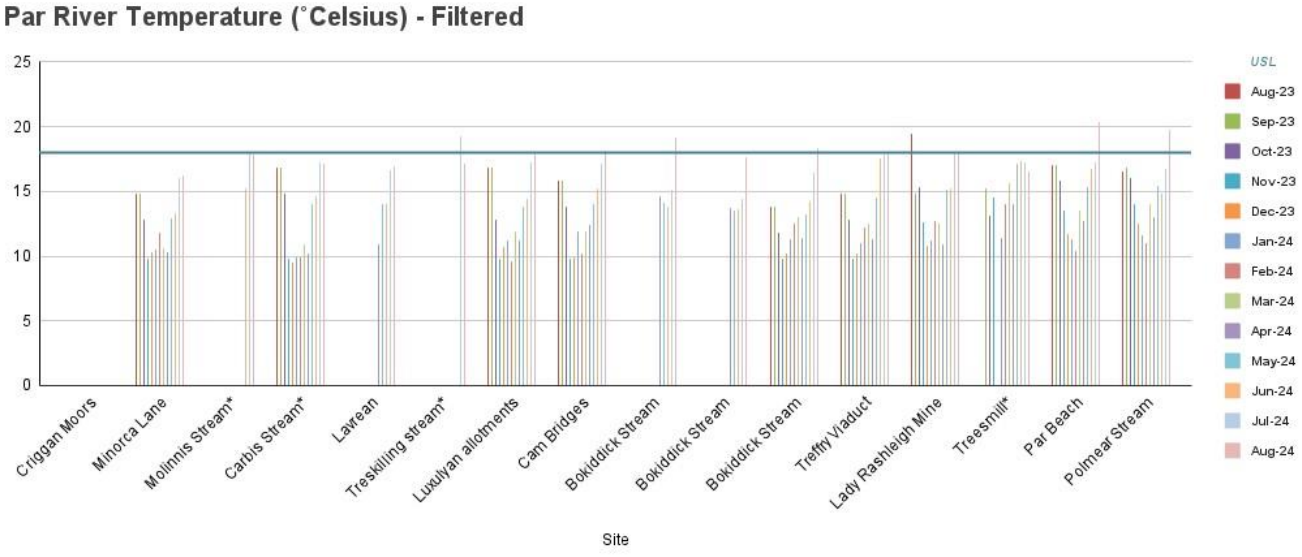
From December 2023 all readings have been taken with the new thermometer/TDS device. Previously, all Upper Par readings, except for Lady Rashleigh Mine, have been taken with the old device. There is a worrying discrepancy with the readings on the older devices.

4. Graphs

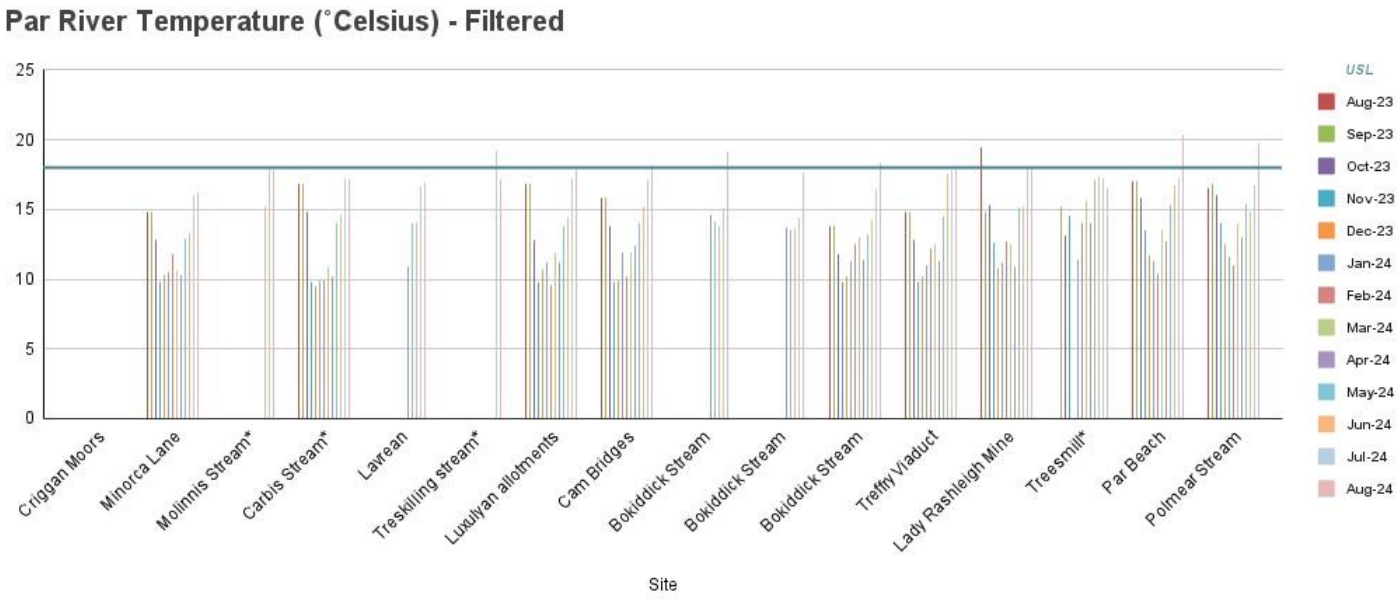
(a) This month:



(b) From 1st August 2023 until now:



(c) From 1st August 2022 until now:

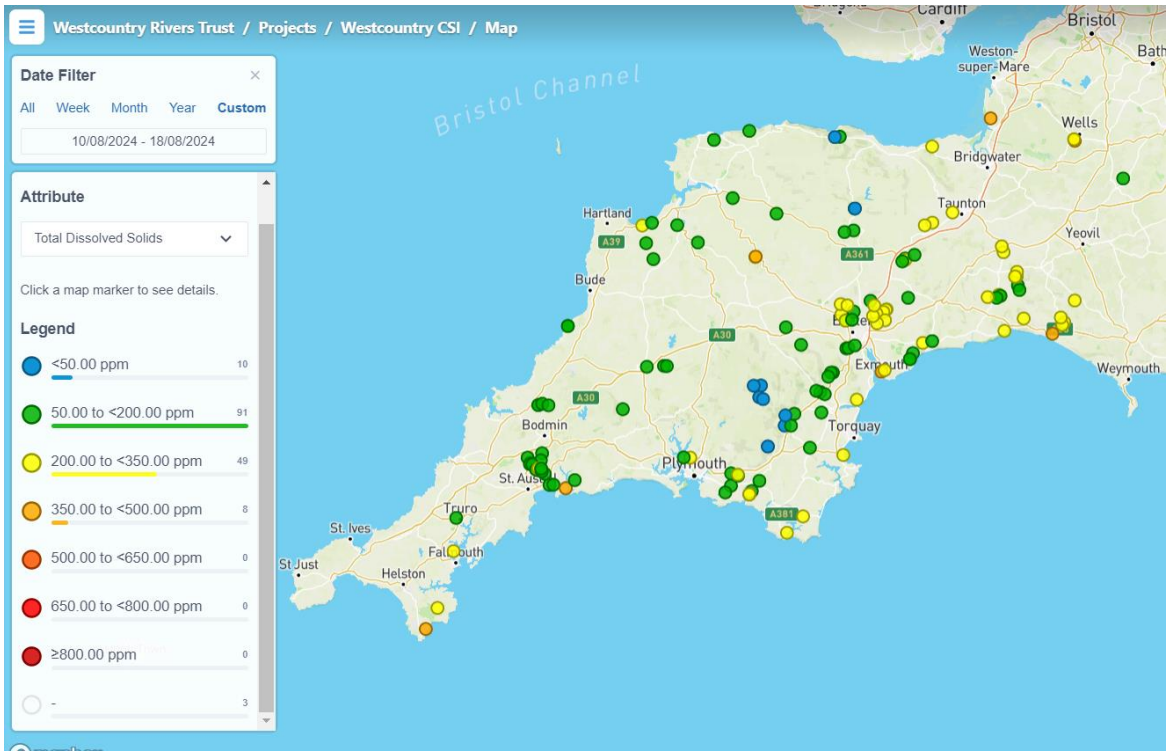


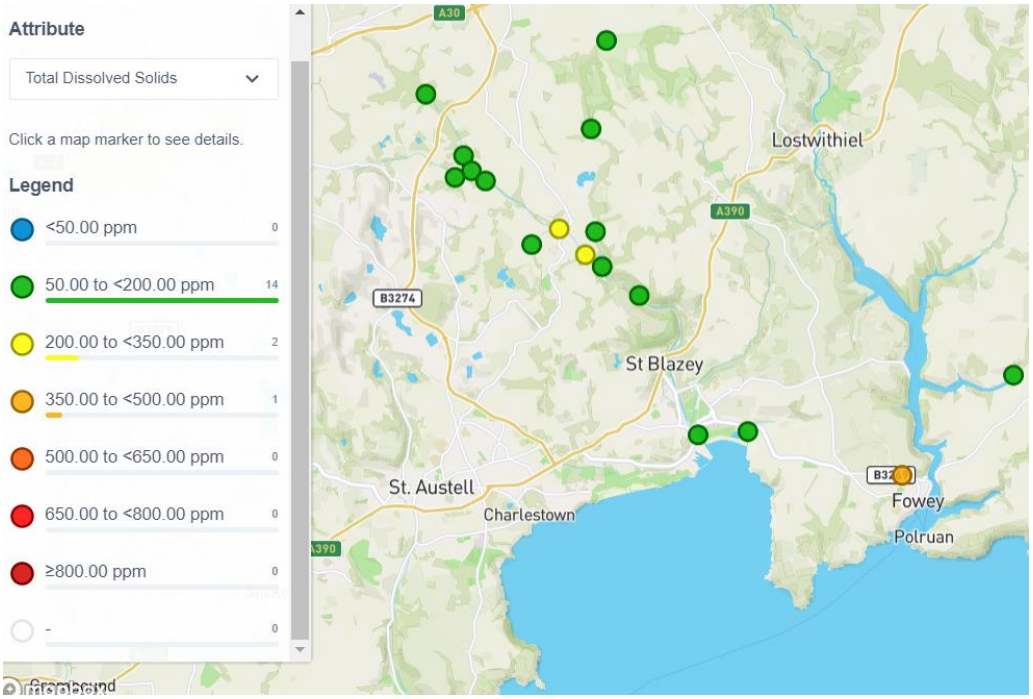
D. TOTAL DISSOLVED SOLIDS

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.



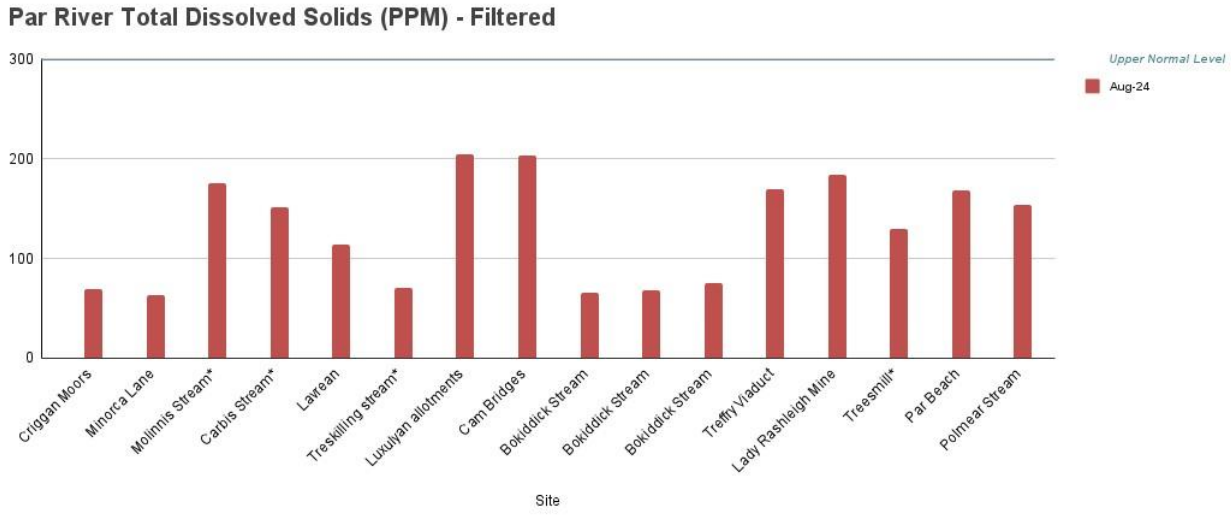


3. Results August 2024

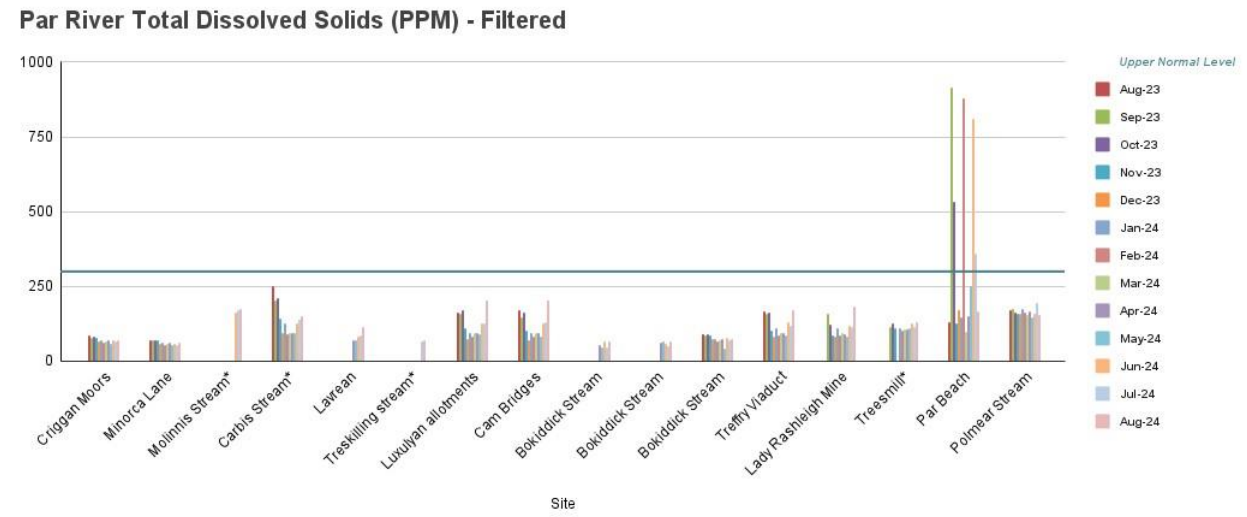
PAR RIVER/TRIBUTARY	LOCATION	Total Dissolved Solids PPM
Par	Criggan Moors, Par River, SX 01882 61133	69
Par	South of Minorca Lane, Par River, SX 02657 59788	63
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271	176
Tributary	Carbis Stream SX 02834 59401	152
Par	Lavrean, Par River SX 03134 59164	114
Tributary	Treskilling, Treskilling Stream, SX 04107 57726	70
Par	Luxulyan allotments, Par River, SX 04732 58045	205
Par	Cam Bridges, Par River, SX 05292 57454	203
Tributary	Trebell Green, Bokiddick Stream SX 0551960226	66
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167	68
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953	75
Par	Treffry Viaduct, Par River, SX 05650 57179	169
Par	Lady Rashleigh Mine, Par River, SX 06451 56509	184
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385	130
Par	Par Beach slipway, SX 0776 53261	168
Tributary	Polmear Stream, Ship Inn, SX 08749 53417	154

4. Graphs

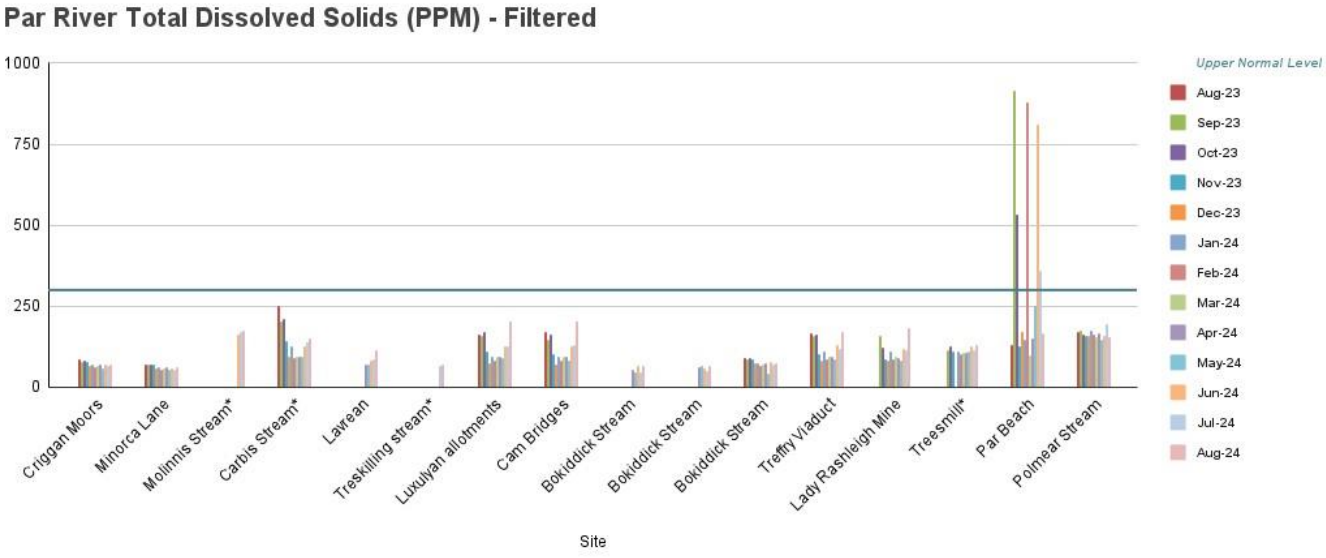
(a) This month



(b) From August 2023 until now:



(c) From August 2022 until now:



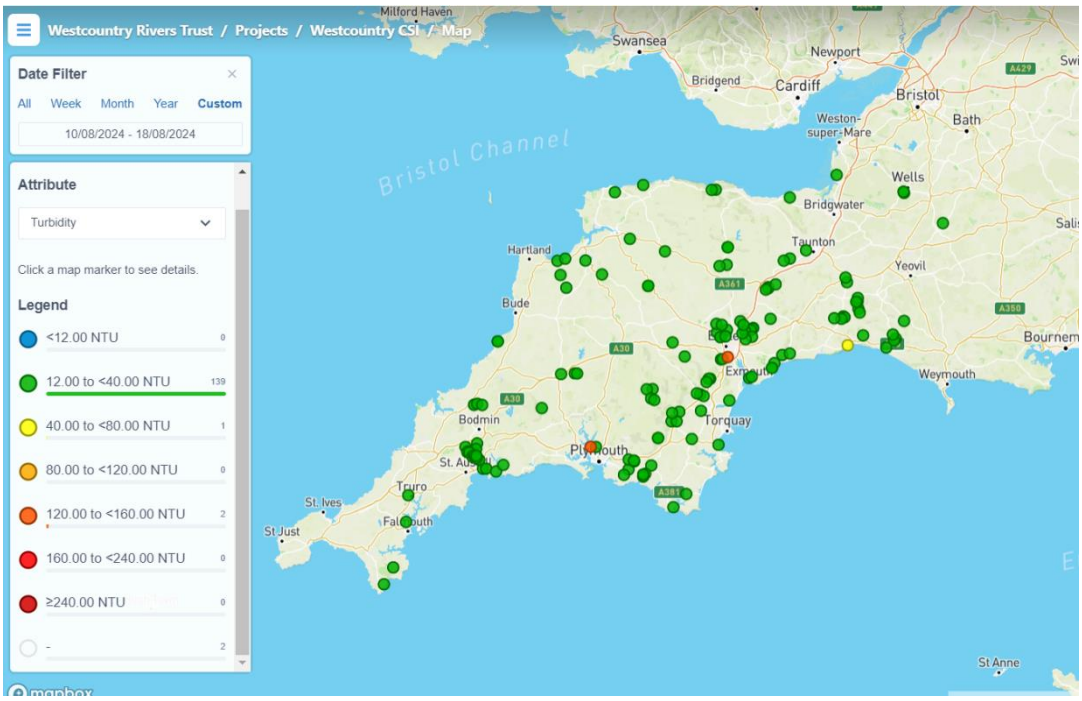
E. TURBIDITY

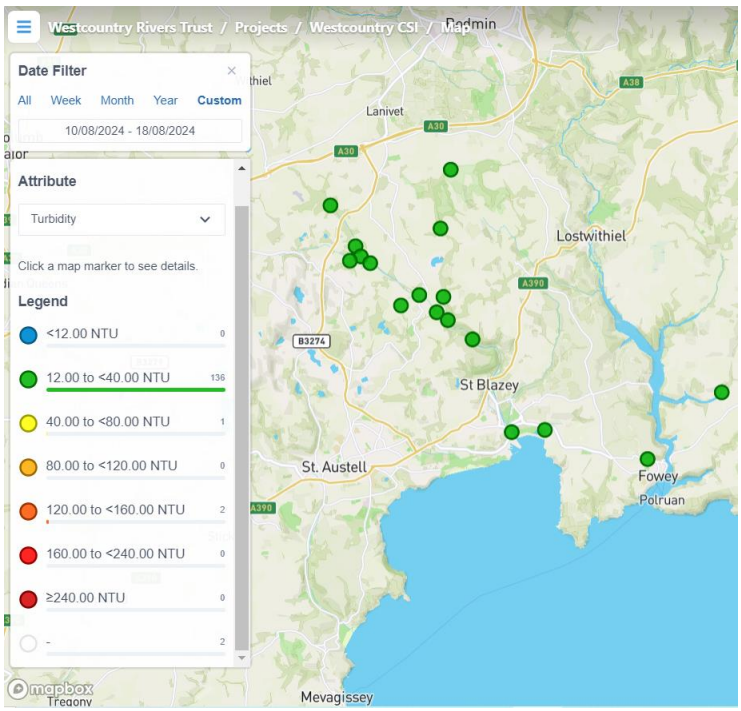
1. This is the WRT explanation of this measure:

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.



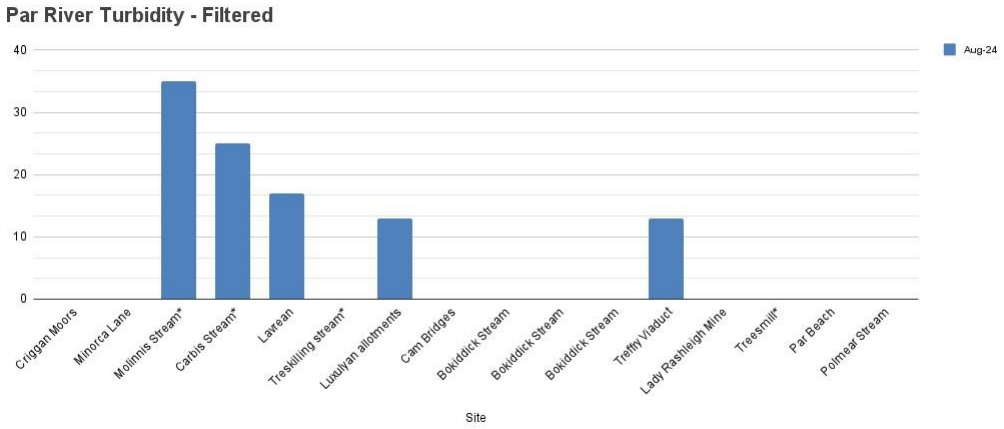


3. Results August 2024:

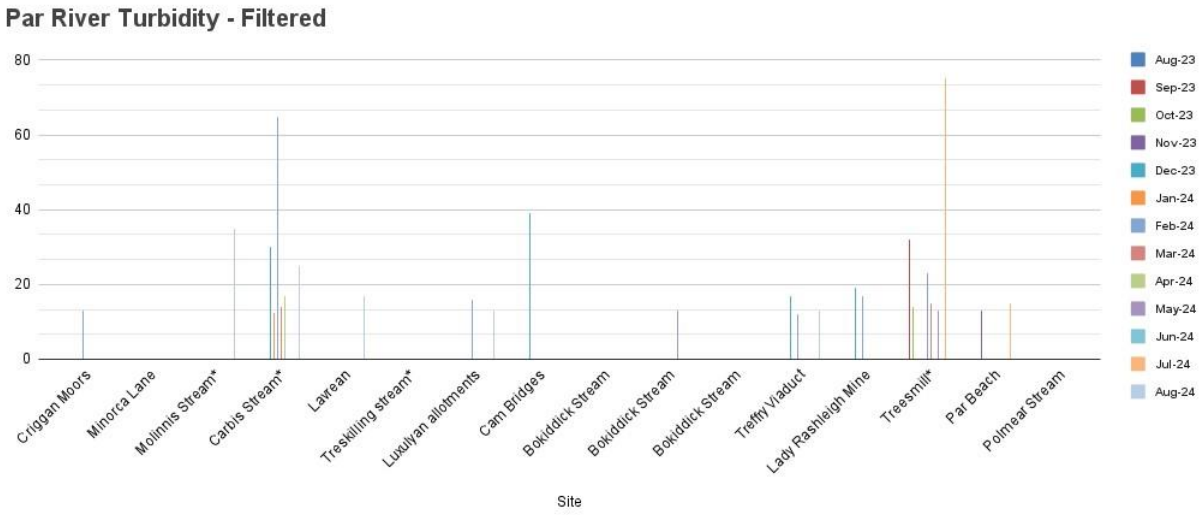
PAR RIVER/TRIBUTARY	LOCATION	Turbidity (NTU)
Par	Criggan Moors, Par River, SX 01882 61133	<12
Par	South of Minorca Lane, Par River, SX 02657 59788	<12
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271	35
Tributary	Carbis Stream SX 02834 59401	25
Par	Lavrean, Par River SX 03134 59164	17
Tributary	Treskilling, Treskilling Stream, SX 04107 57726	<12
Par	Luxulyan allotments, Par River, SX 04732 58045	13
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	13
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

4. Graphs

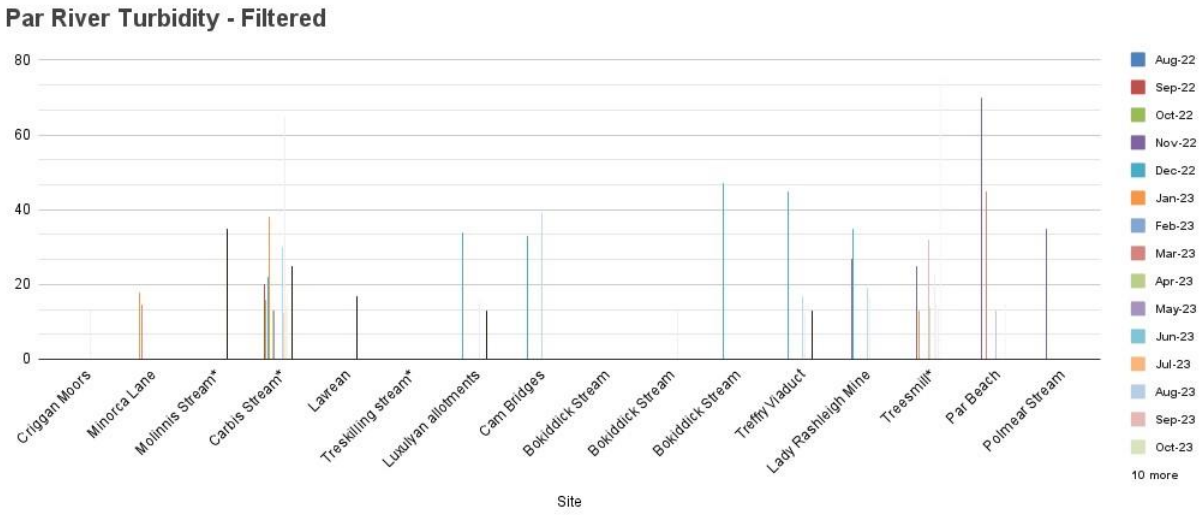
(a) This month:



(b) From August 2023 until now:



(c) From August 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.)

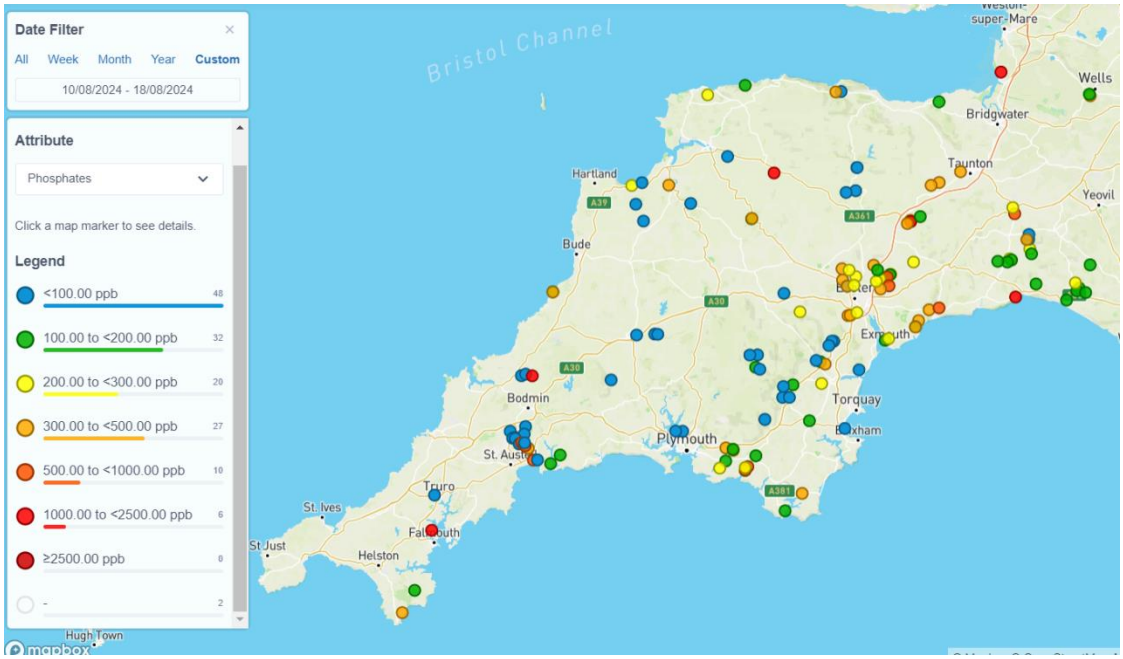
Ranges on phosphate diagnostic colour chart:

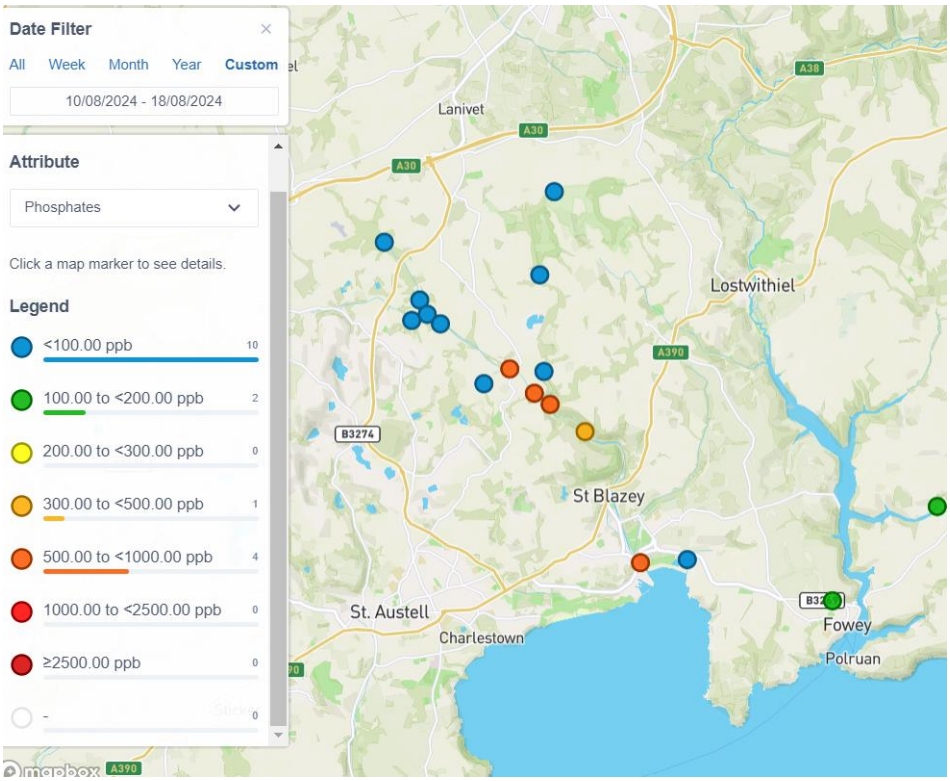
0 – 100 OK

200 – 300 HIGH

500 – 2500 – TOO HIGH

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





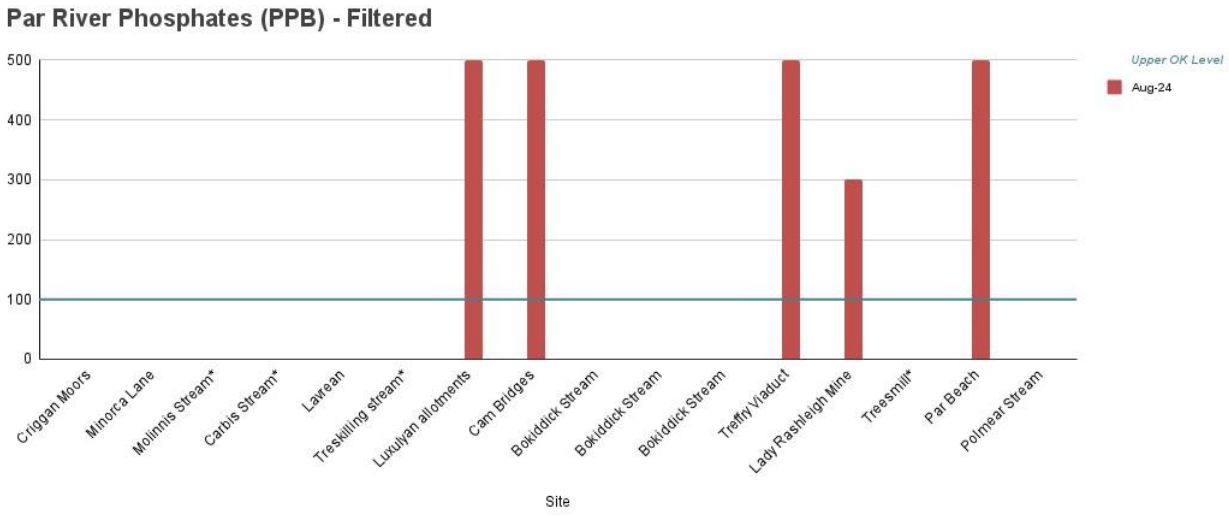
3. Results August 2024

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).

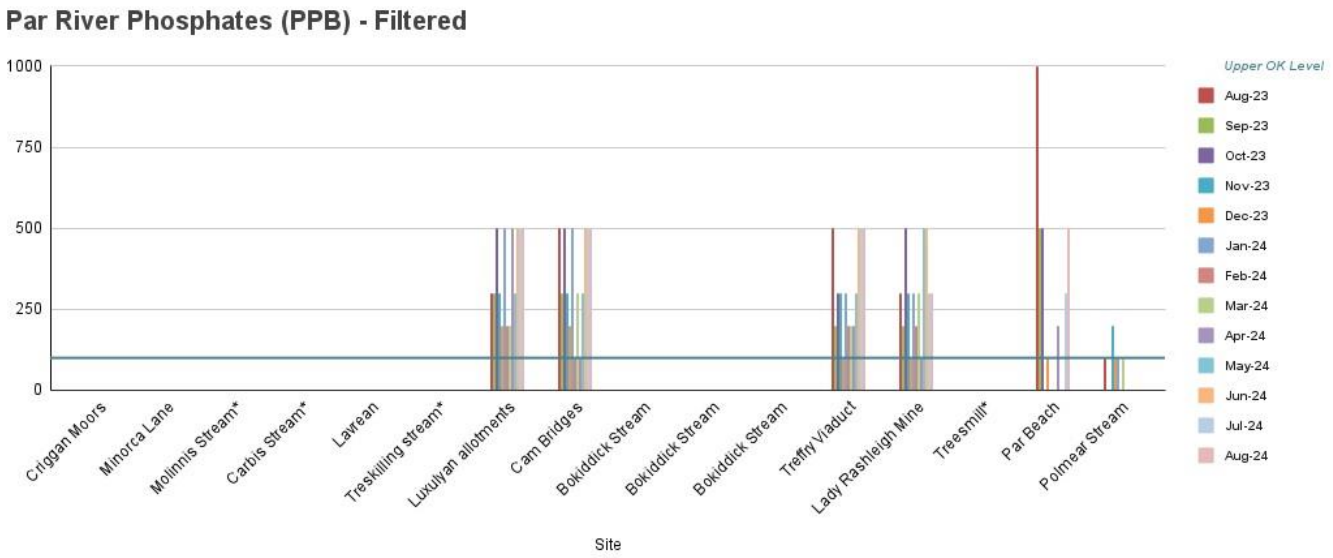
PAR RIVER/TRIBUTARY	LOCATION	Phosphates PPB
Par	Criggan Moors, Par River, SX 01882 61133	0
Par	South of Minorca Lane, Par River, SX 02657 59788	0
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271	0
Tributary	Carbis Stream SX 02834 59401	0
Par	Lavrean, Par River SX 03134 59164	0
Tributary	Treskilling, Treskilling Stream, SX 04107 57726	0
Par	Luxulyan allotments, Par River, SX 04732 58045	**500**
Par	Cam Bridges, Par River, SX 05292 57454	**500**
Tributary	Trebell Green, Bokiddick Stream SX 0551960226	0
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167	0
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953	0
Par	Treffry Viaduct, Par River, SX 05650 57179	**500**
Par	Lady Rashleigh Mine, Par River, SX 06451 56509	**300**
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385	0
Par	Par Beach slipway, SX 0776 53261	**500**
Tributary	Polmear Stream, Ship Inn, SX 08749 53417	0

4. Graphs

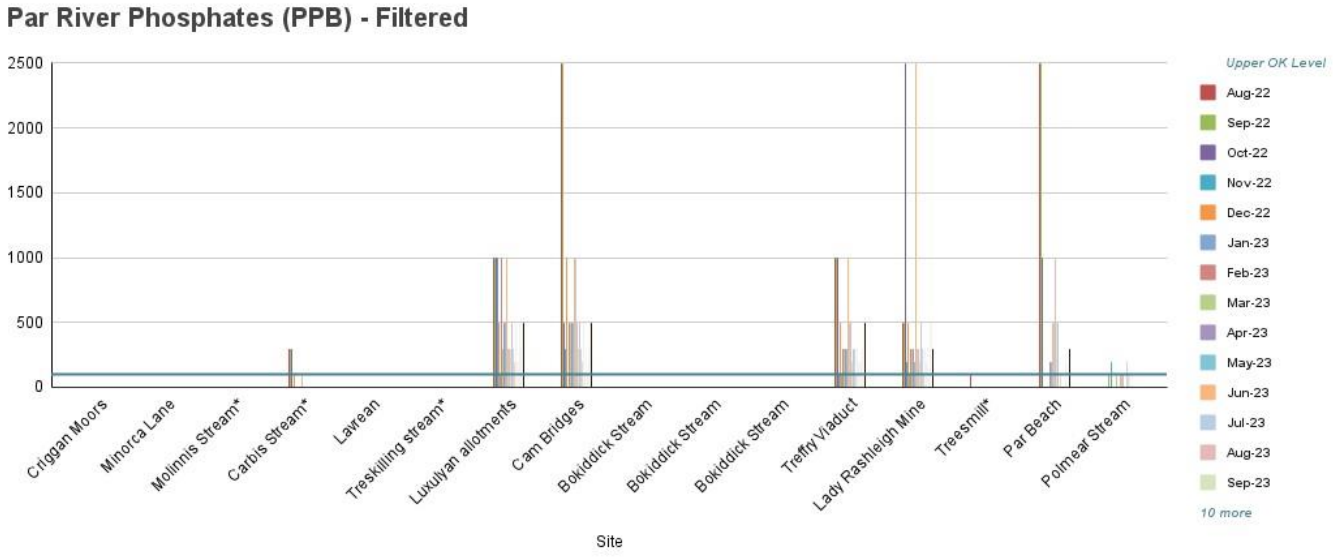
(a) This month:



(b) From August 2023 until now:



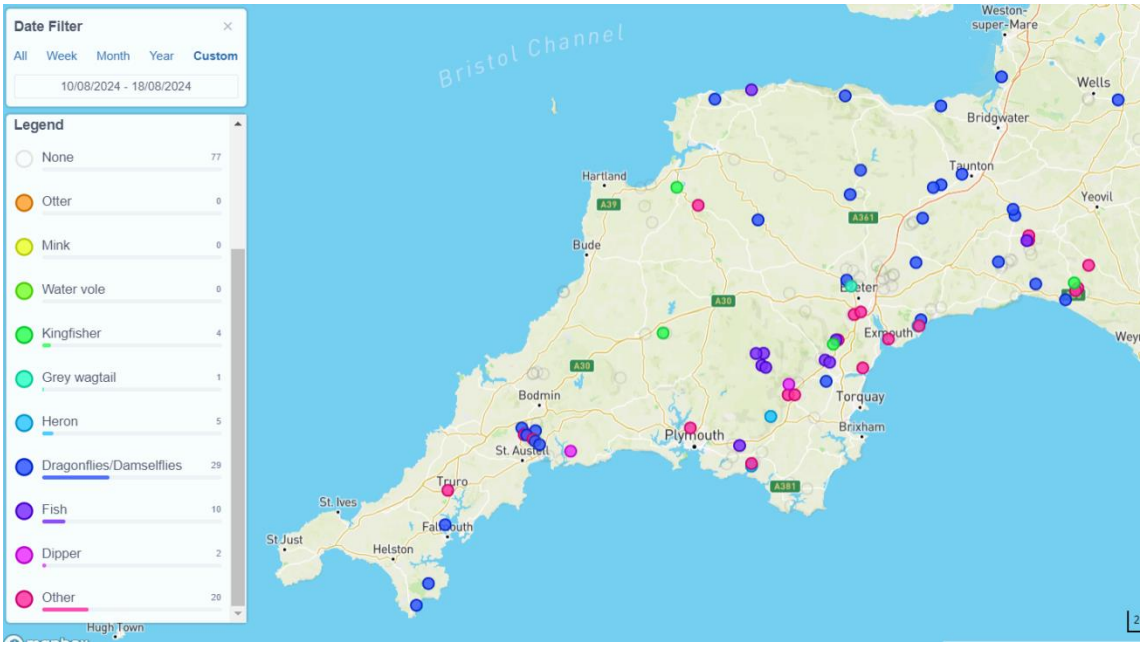
(c) From August 2022 until now:

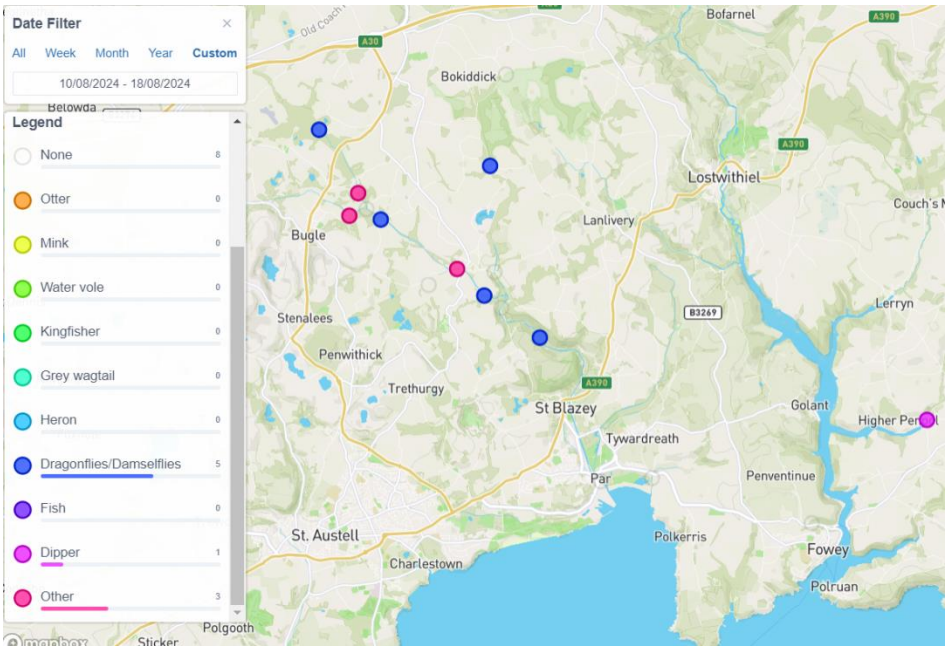


G. WILDLIFE & INVASIVE PLANTS

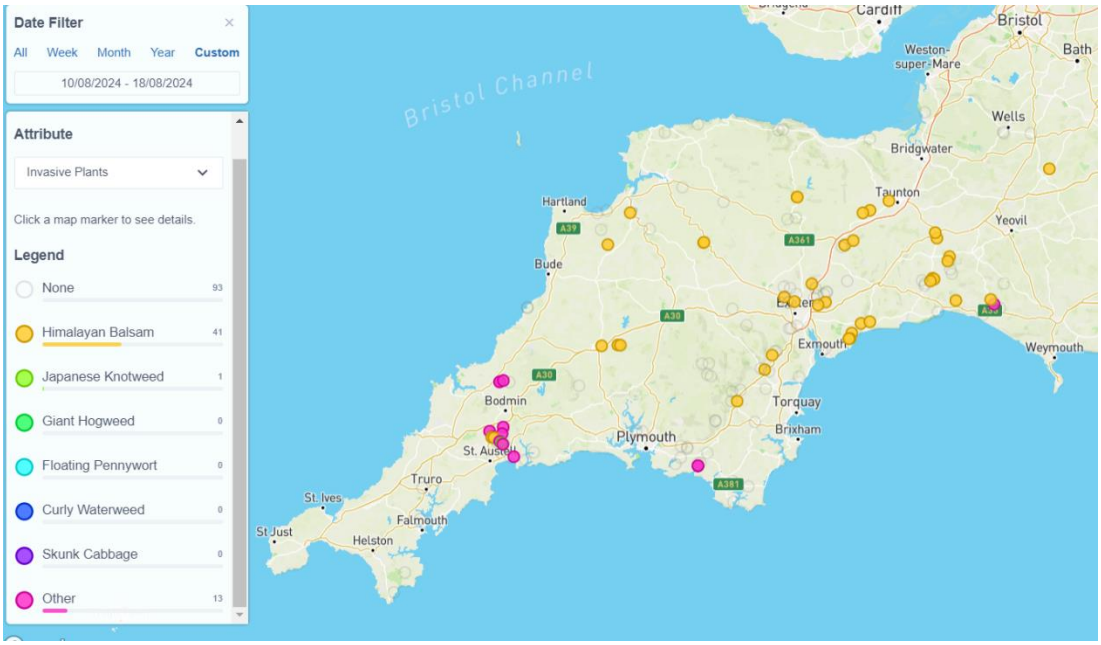
(a) Wildlife maps

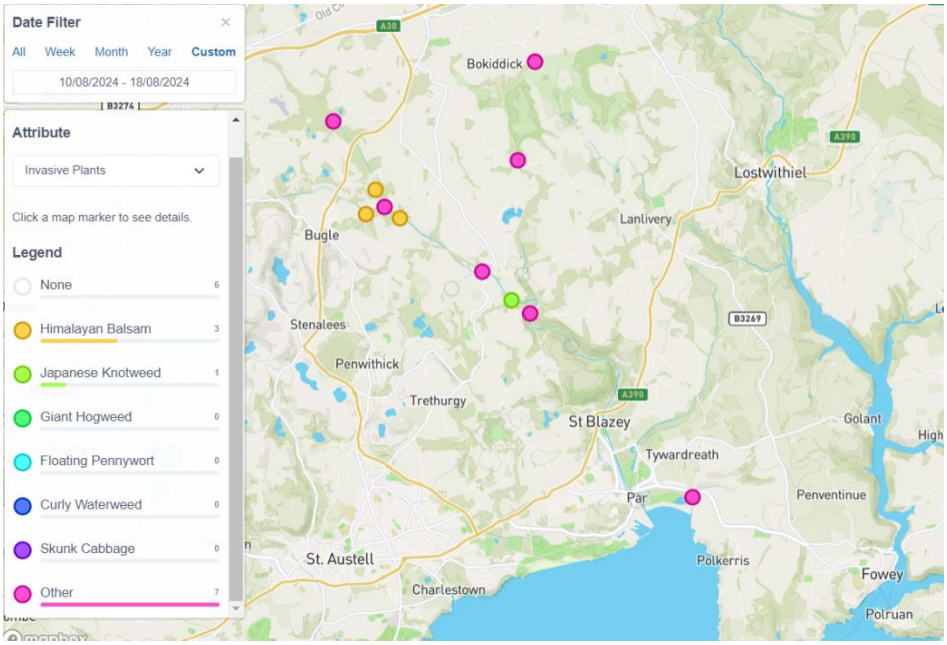
Evidence of otters is found nearly every month, but frequently it is not found at our monitoring points and when it is it will be entered under 'Other' because live sightings are extremely rare.





(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	Dragonfly	Hemlock Water Dropwort
South of Minorca Lane, Par River, SX 02657 59788	Pond skaters	Hemlock Water Dropwort Himalayan Balsam
Forkandles Farm, Molinnis Stream, SX 02460 59271	Pond skaters	Himalayan Balsam Japanese Knotweed
Carbis Stream SX 02834 59401	None	Hemlock Water Dropwort
Lavrean, Par River SX 03134 59164	Dragonfly Pond skaters	Hemlock Water Dropwort Himalayan Balsam
Treskilling, Treskilling Stream, SX 04107 57726	None	None
Luxulyan allotments, Par River, SX 04732 58045	Old otter spraint, otter anal jelly	Hemlock Water Dropwort
Cam Bridges, Par River, SX 05292 57454	Dragonfly	Hemlock Water Dropwort, Japanese Knotweed
Trebell Green, Bokiddick Stream SX 0551960226	None	Hemlock Water Dropwort
Corgee Moor, Bokiddick Stream SX 0593462167	Dragonfly	Hemlock Water Dropwort
Gatty's Bridge, Bokiddick Stream SX 05531 57953	None	None
Treffry Viaduct, Par River, SX 05650 57179	None	Hemlock Water Dropwort
Lady Rashleigh Mine, Par River, SX 06451 56509	Dragonflies (no riverfly survey this month)	Hemlock Water Dropwort
Treesmill, Tywardreath Stream, SX 08873 55385	None	Himalayan Balsam
Par Beach slipway, SX 0776 53261	None	None
Polmear Stream, Ship Inn, SX 08749 53417	None	Hemlock Water Dropwort

Old otter spraint (left) and recent anal jelly on riverside stone near Luxulyan allotments

Location of stone shown above. Note the line of foam flecks, believed to be treated effluent from St Austell STW upstream. These flecks are nearly always visible from here to Lady Rashleigh Mine.

The search for evidence for otters was confined to our CSI monitoring points, partly because of limited time but also because of the closure of the public footpath next to the river (actually the cut made by Treffry, not the canal as stated in the closure notice) between Ponts Mill and Tywardreath Highway. However, the findings on the Upper Par at Luxulyan allotments were proof of their continued presence. The anal jelly shown in the first of the two preceding photographs is a common but misleading term, as this explanation from the Somerset Otter Group explains:

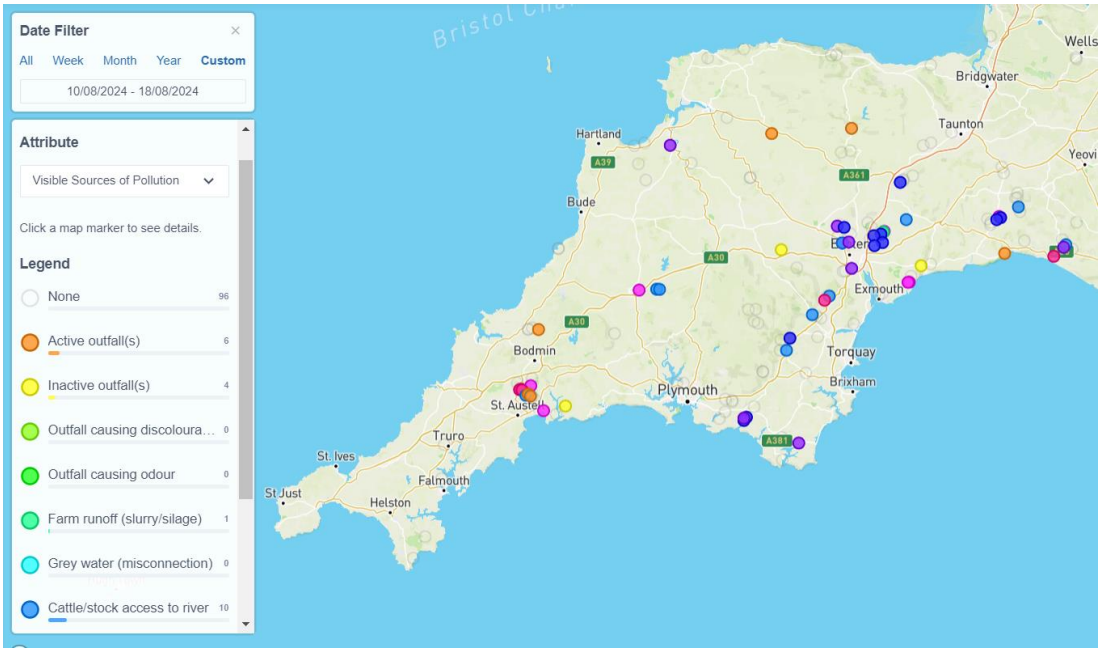
Anal jelly is a misnomer for another secretion deposited by an otter. It looks like marmalade without the lumps of peel, and like marmalade it can vary in colour from golden orange, almost brown, (the bitter, Oxford sort), through a paler yellow (Golden Shred), to a greeny tone (lime?). There are no bones or fish bits, but it has the correct smell. Originally it was thought to be the neat secretion from the anal gland with which the otter coats its secretion, hence the name. Now it is thought to be the mucus lining of the gut, which acts as a lubricant and protection against all the sharp bones and undigested bits.

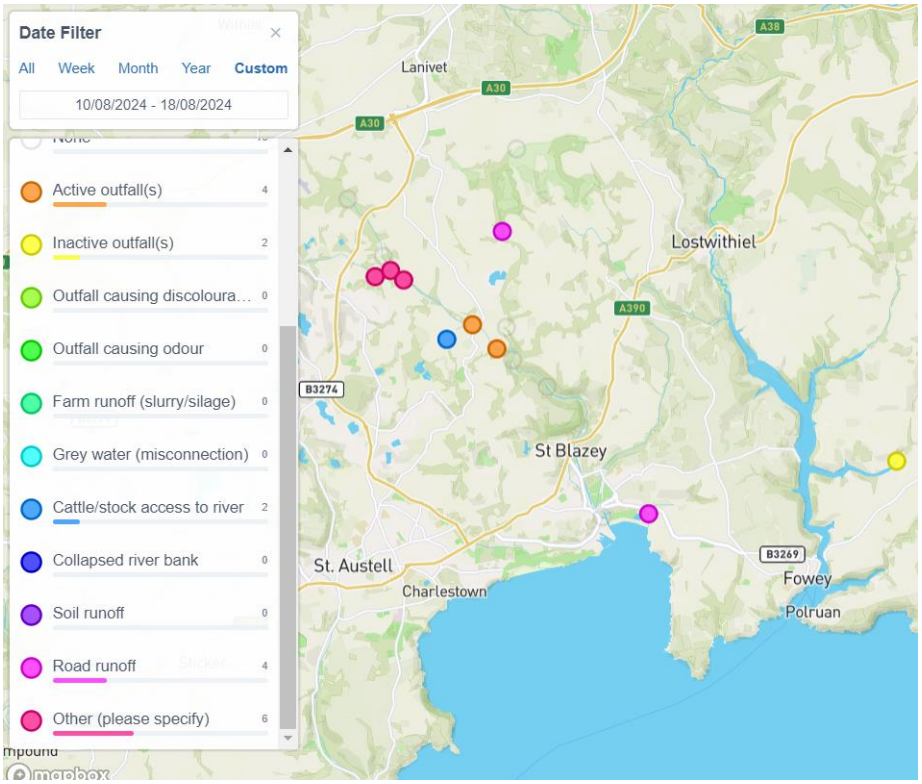
Source: http://www.somersetottergroup.org.uk/94-2/elementor-2862 .

A riverfly survey was planned for Lady Rashleigh Mine but a memory lapse on the part of the writer meant we didn't have all the necessary kit; normal monitoring will resume in September.

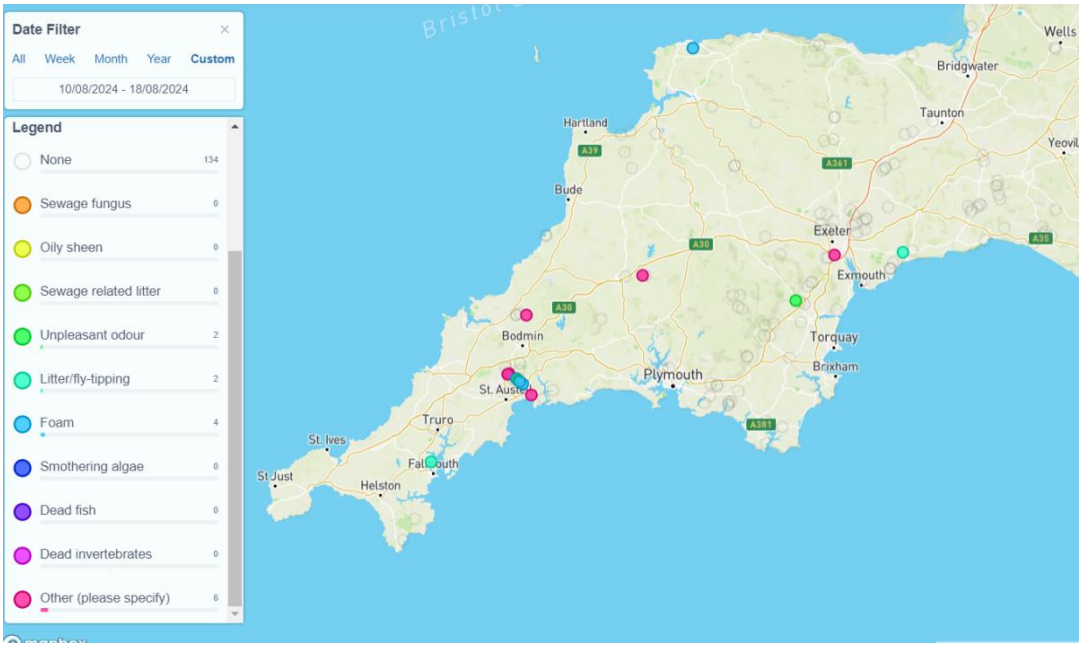
H. POLLUTION SOURCES AND EVIDENCE

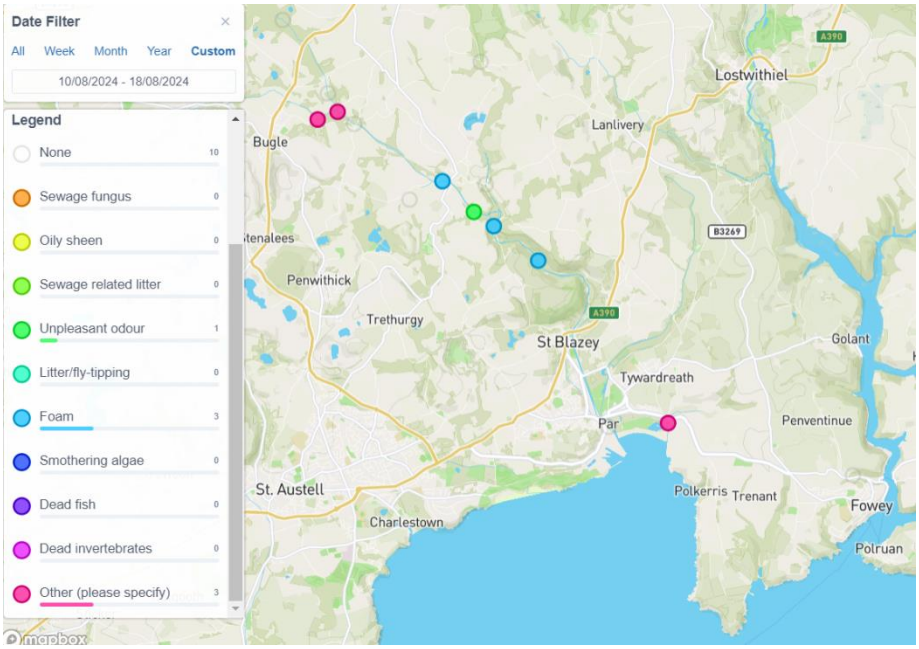
1. Pollution sources





2. Recent evidence of pollution





Pollution is discussed under Points of Concern (pages 4 to 7). The presumed visible evidence of treated effluent from St Austell STW at Luxulyan is shown in photograph 2 on page 25. Evidence of china clay in the water was seen in the Carbis and Molinnis Streams.

The Carbis Stream at SX 02834 59401. The water is grey/white. Note also objects deposited in the river to allow crossing. There should be a bridge on this public right of way (Treverbyn 424/34/1) but this has not been the case for many years.

The confluence of the Upper Par (foreground) with the Carbis Stream. The water of the Carbis is white with china clay.

The Molinnis Stream at SX 02460 59271. The water has a grey/white tinge as a result of china clay.

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.

Ripples and reflections on the Treesmill Stream Photo: Maggie Tagney

Report compiled by Roger Smith, September 2024