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.

APRIL 2025

Heavy rain caused the Par River to flood near Minorca Lane, submerging the footpath (on the right) and making it impassable for the first time since monitoring began in 2020.

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

1. Data

We sampled at 16 locations between 14th and 22nd April 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 (5 for Temp. and TDS)*	TRIBUTARY OF LOWER PAR (POLMEAR STREAM) 2 TESTING LOCATIONS
TEMPERATURE ˚ CELSIUS (SHOULD NOT EXCEED 18˚ CELSIUS)	Mean 10.8 Median 11.7 Min 9.2 Max 12	Mean 12.63 Median 12.7 Min 12.4 Max 12.8	Mean 11.73 Median 12 Min 9.6 Max 13	Mean 15.65 Median 15.65 Min 14 Max 17.3
TOTAL DISSOLVED SOLIDS PPM (SHOULD NOT EXCEED 300 PPM)	Mean 58 Median 60 Min 48 Max 67	Mean 115.66 Median 66 Min 61 Max 220	Mean 67.33 Median 60 Min 50 Max 115	Mean 138 Median 138 Min 108 Max 168
TURBIDITY (SHOULD BE <12 ON SECCHI TUBE. FOR AVERAGING ANY READING <12 IS COUNTED AS 0)	Mean 9.2 Median 14 Min 0 Max 17	Mean 19 Median 19 Min 17 Max 21	Mean 8.33 Median 0 Min 0 Max 50	Mean 8.5 Median 8.5 Min 0 Max 17
PHOSPHATES PPB (SHOULD NOT EXCEED 100 PPB)	Mean 80 Median 0 Min 0 Max **200**	Mean **166.66** Median **200** Min 100 Max **200**	Mean 0 Median 0 Min 0 Max 0	Mean 50 Median 50 Min 0 Max 100
RIVERFLY SCORE (TRIGGER LEVEL AT LRM SHOULD BE ≥ 6)	RIVERFLY SURVEYS WILL RESUME IN MAY 2025. THE RIVER WAS TOO HIGH AND FAST FOR A SURVEY THIS MONTH.			
WILDLIFE EVIDENCE	HEARD: Chaffinch, Wren, Blue Tit, Carrion Crow, Robin, Grey Wagtail, Goldcrest, Blackbird,, Great Tit, Willow Warbler, Greenfinch, Dunnock, Wood Pigeon, Jackdaw, Blackcap SEEN: Jay, Pheasant, Fox	HEARD: Wren SEEN: Dipper, Grey Wagtail, Cormorant, Herring Gull	HEARD: Wren, Blue Tit, Chaffinch, Robin, Blackcap, Willow Warbler, Great Tit SEEN: .	Robin, Wren, Blackbird, Chaffinch, Great Tit, Blue Tit, Coal Tit
INVASIVE PLANTS	Hemlock Water Dropwort, Japanese Knotweed	Hemlock Water Dropwort	Hemlock Water Dropwort, Japanese Knotweed	Hemlock Water Dropwort

2. Key points

(a) Positive signs

Wildlife sightings, including a Dipper and Grey Wagtails, which are positive indicators for river water quality. The establishment of beavers near Helman Tor will hopefully stimulate biodiversity.

(b) Points of concern

(i) Phosphate readings on the main river from Luxulyan allotments downstream were lower than last month but still *Too High* according to Westcountry Rivers trust's guidance. The level of phosphates on this stretch is in inverse proportion to the river level.

(ii) Smell at Cam Bridges.

(iii) While the heavy rain, and subsequent high river levels, diluted phosphate levels, it also triggered SWW's sewage discharges, especially from the overflow at the St Austell North STW at Luxulyan (see later). For example, one spill from that facility began at 11:16 on 15th April and ceased 46 hours and 58 minutes later at 10:15 on 17th April. This facility is the one responsible for the vast majority of spills and these seem to occur with every heavy rainfall.

(iv) The main river is too straight. Combined with the granite geology of the area, it means that high rainfall causes the level to rise quickly. Increased weather volatility and intensity of rainfall linked to the climate crisis make such events more serious and raise the risk of flooding. Fortunately, the flooding at Bridges appears to have been prevented by improved drainage, but for the first time since starting river monitoring in 2020 it was impossible to reach Minorca Lane from the footpath coming from Higher Menadue on the same day that other monitoring occurred..

(c) Areas for further research

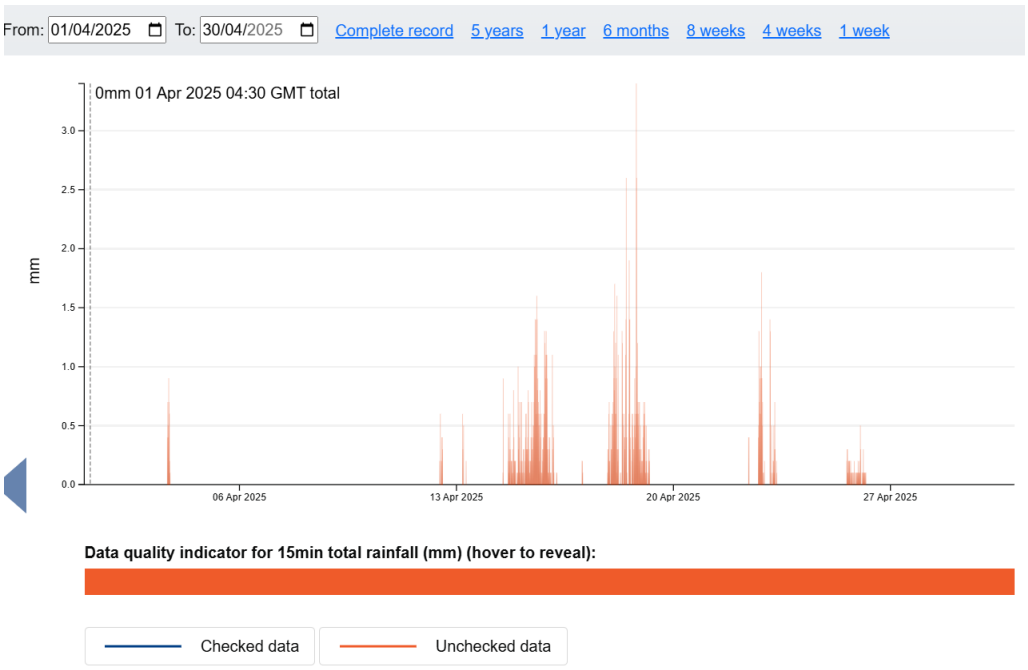
(i) The main river has many problems (although the picture is not universally bad) but the impact of frequent, lengthy sewage discharges from St Austell North STW merits investigation.

(ii) The impact of beavers on the Bokiddick Stream is hoped to be positive for biodiversity, water quality and river flow, based on experience elsewhere, but it would be useful to see an evaluation, not least because it might negate the views of a small number of people who seem to be opposed.

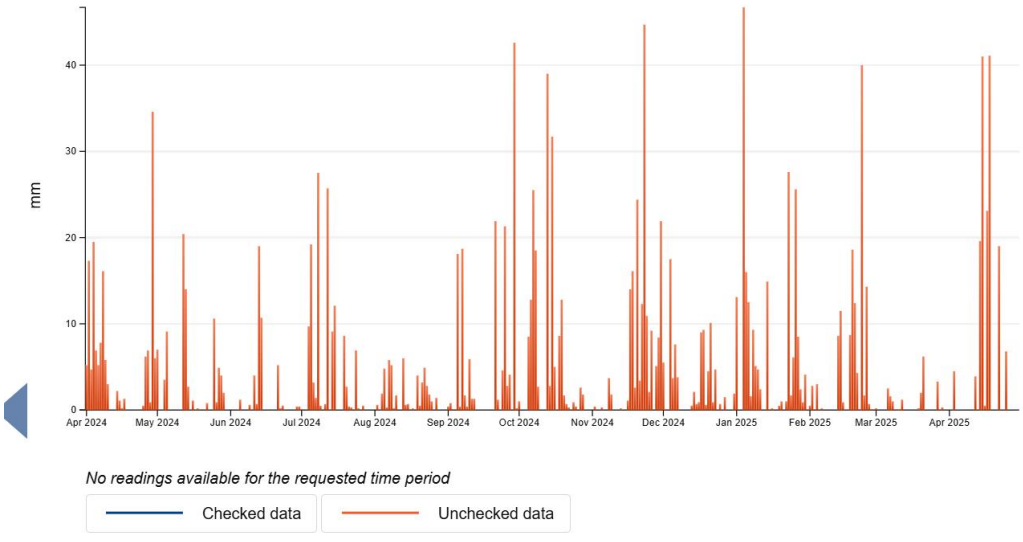
B. RAINFALL, RIVER LEVELS AND FLOW

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

(a) April 2025

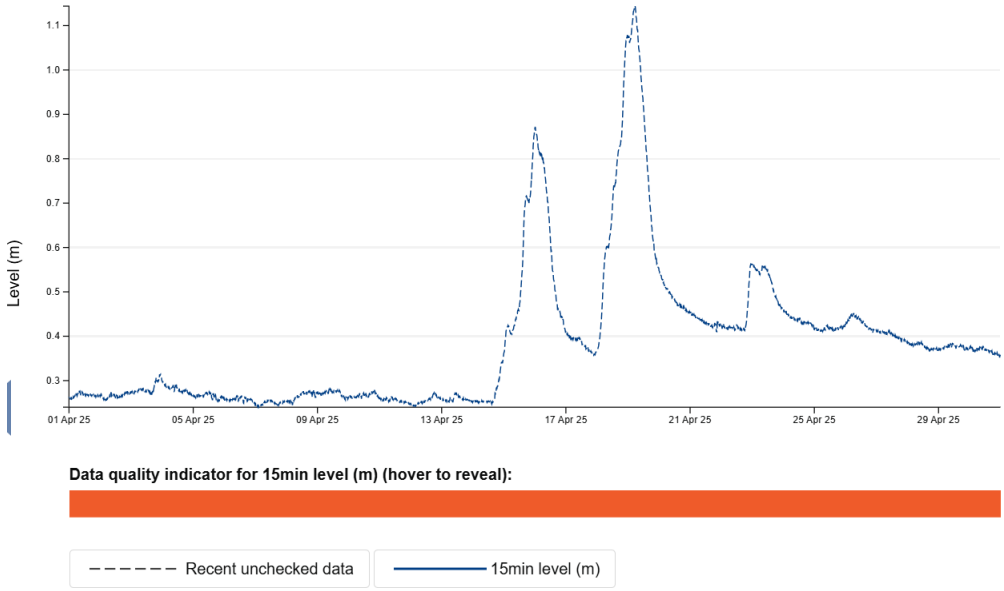


(b) From 1st April 2024 until 30th April 2025

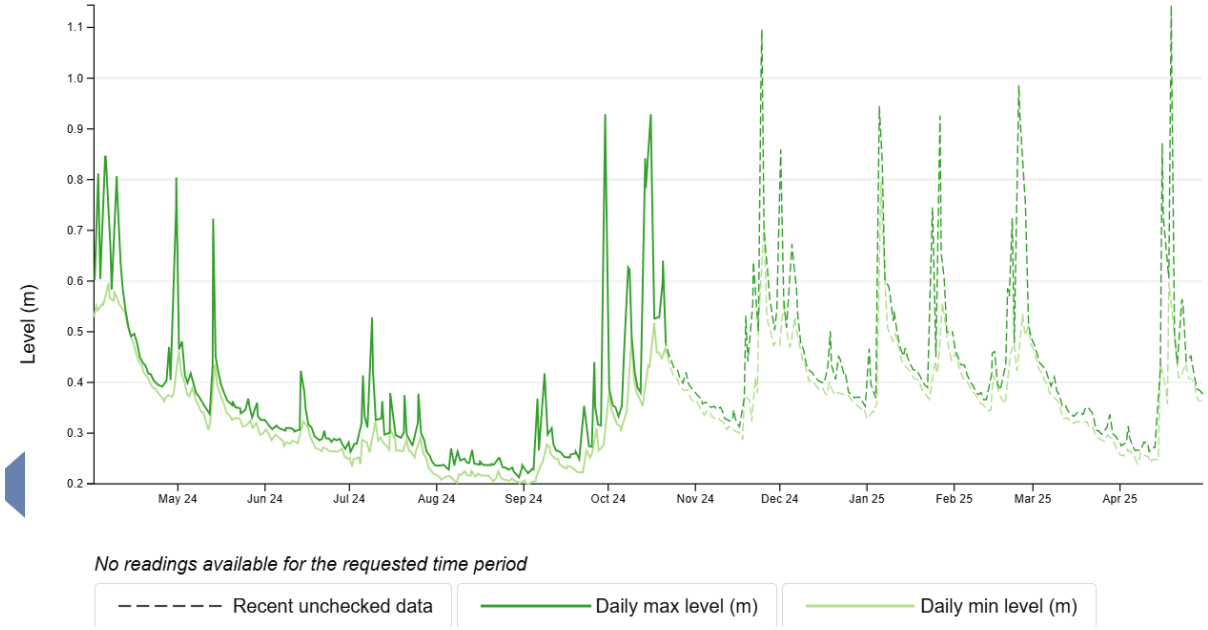


2. Par River levels at Luxulyan preceding and during surveys. Source: https://environment.data.gov.uk/hydrology/station/14aadf3c-3d4d-44b3-b26b-cf705827d00e

(a) Levels for April 2025



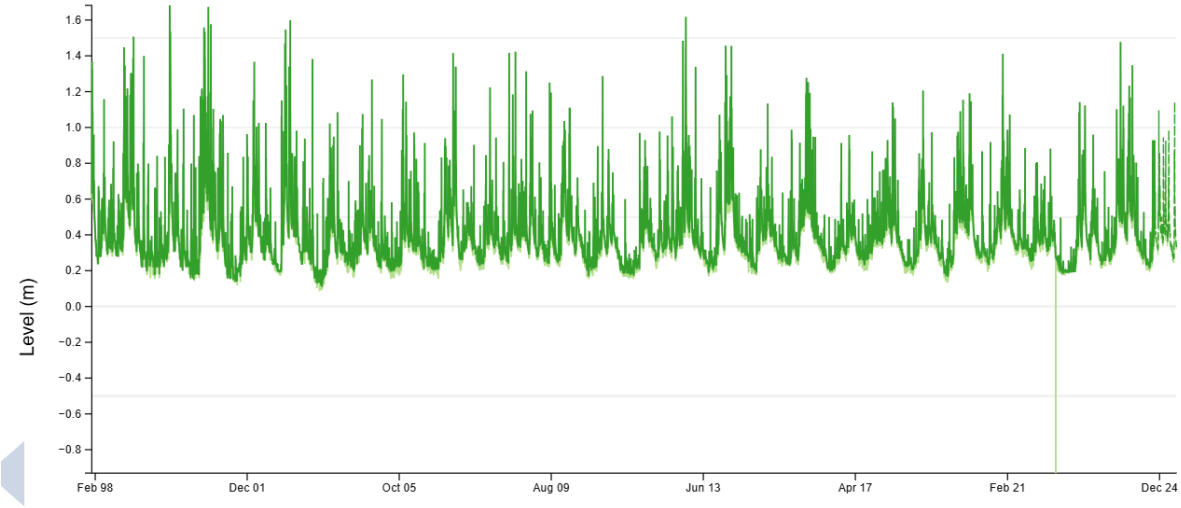
(b) Levels from 1st April 2024 until 30th April 2025



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

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

(d) River levels and flooding at Bridges, Luxulyan. Refer to levels in previous section.

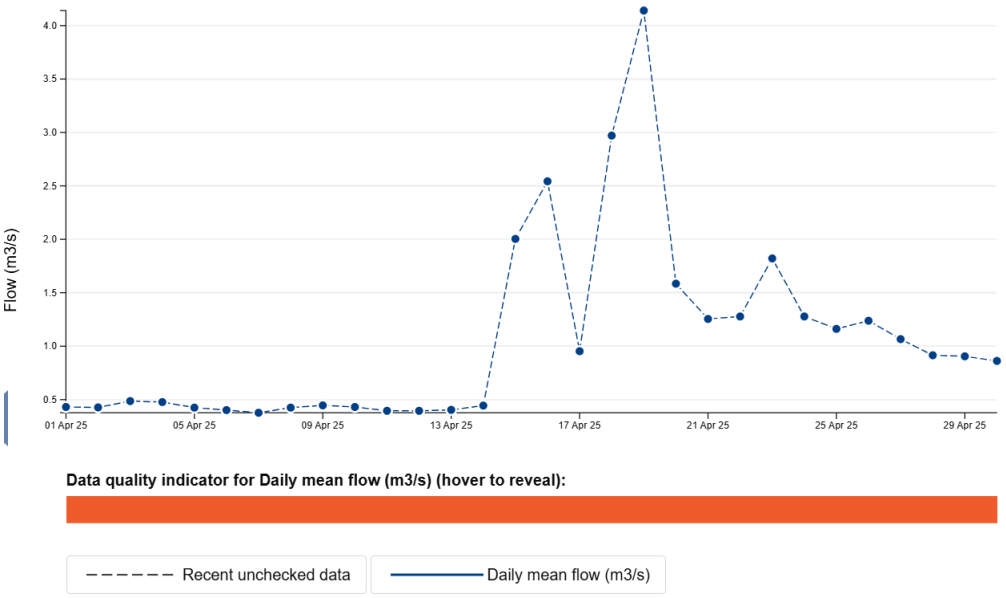


No readings available for the requested time period

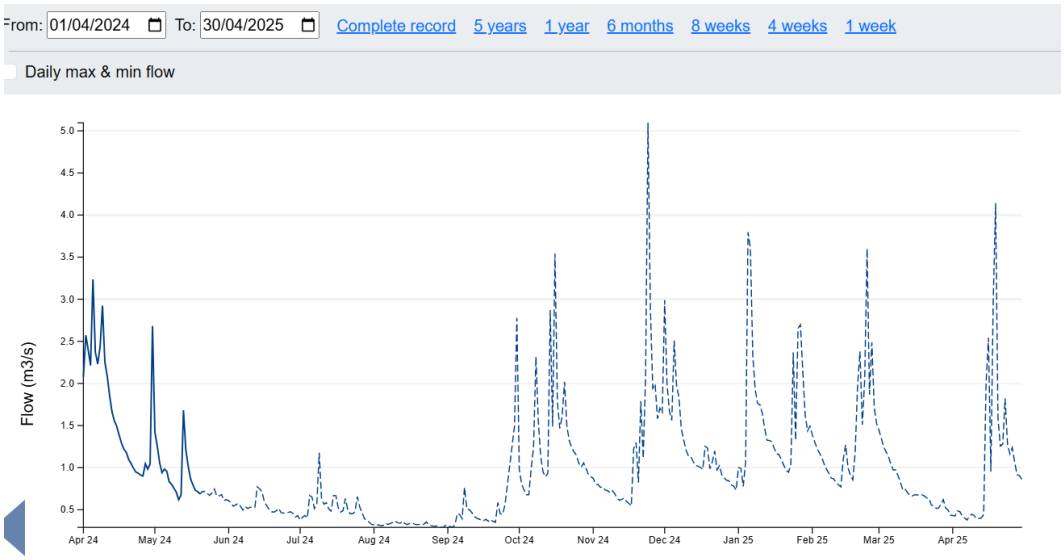
Recent unchecked data | Daily max level (m) | Daily min level (m)

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

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



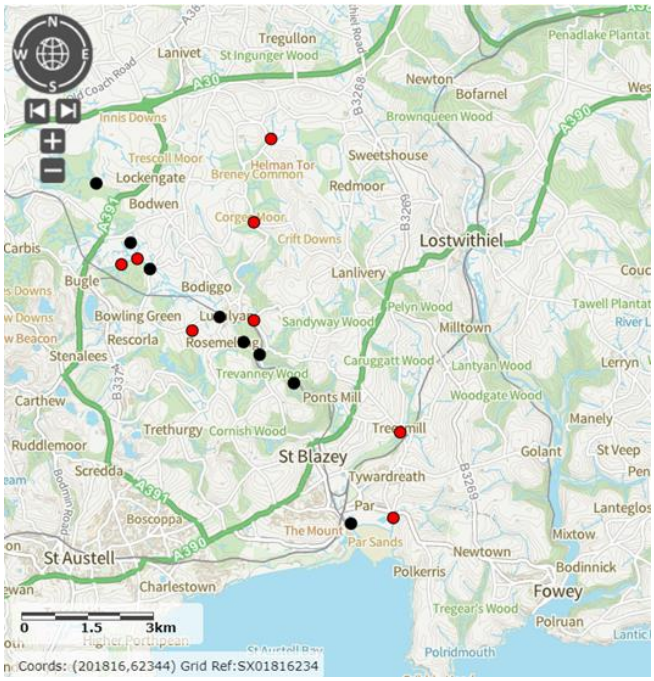
(b) From 1st April 2024 until 30th April 2025



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

C. APRIL 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**	22/4/2025 9:50	CSI sample & Cartographer record.	Roger Smith
South of Minorca Lane, Par River, SX02668 59747	**PAR**	16/4/2025 8:20	CSI sampling. Cartographer record.	Roger Smith
Near Forkandles Farm, Molinnis Stream, SX 02460 59271	**SECONDARY TRIBUTARY (OF CARBIS STREAM)**	16/4/2025 9:40	CSI sample & Cartographer record.	Roger Smith
Carbis Stream SX 02834 59401	**TRIBUTARY**	16/4/2025 8:45	CSI sampling. Cartographer record.	Roger Smith
Lavrean, Par River SX 03134 59164	**PAR**	16/4/2025 9:20	CSI sampling. Cartographer record.	Roger Smith
Treskilling, Treskilling Stream, SX 04107 57726	**TRIBUTARY**	16/4/2025 10:30	CSI sampling. Cartographer record.	Roger Smith
Luxulyan allotments, Par River, SX 04732 58045	**PAR**	16/4/2025 10:55	CSI sampling. Cartographer record.	Roger Smith
Cam Bridges, Par River, SX 05292 57454	**PAR**	16/4/2025 12:50	CSI sampling. Cartographer record.	Roger Smith
Trebell Green, Bokiddick Stream SX 0551960226	**TRIBUTARY**	14/4/2025 10:45	CSI sampling. Cartographer record.	Roger Smith
Corgee Moor, Bokiddick Stream SX 0593462167	**TRIBUTARY**	16/4/2025 11:45	CSI sampling. Cartographer record.	Roger Smith
Gatty's Bridge, Bokiddick Stream SX 05531 57953	**TRIBUTARY**	16/4/2025 15.40	CSI sampling. Cartographer record.	Joan Farmer
Treffry Viaduct, Par River, SX 05650 57179	**PAR**	16/4/2025 13.30	CSI sampling. Cartographer record.	Joan Farmer
Lady Rashleigh Mine, Par River, SX 06451 56509	**PAR**	16/4/2025 14.00	CSI sampling. Cartographer record.	Roger Smith, Joan Farmer, Veronica Jones
Treesmill, Tywardreath Stream, SX 08873 55385	**TRIBUTARY**	21/4/2025 11.35	CSI sampling. Cartographer record.	Maggie Tagney
Par Beach slipway, SX 0776 53261	**PAR**	16/4/2025 15:15	CSI sampling. Cartographer record.	Brian Harrisson
Polmear Stream, Ship Inn SX 08749 53417	**TRIBUTARY**	16/4/2025 15:50	CSI sampling. Cartographer record.	Simon Tagney

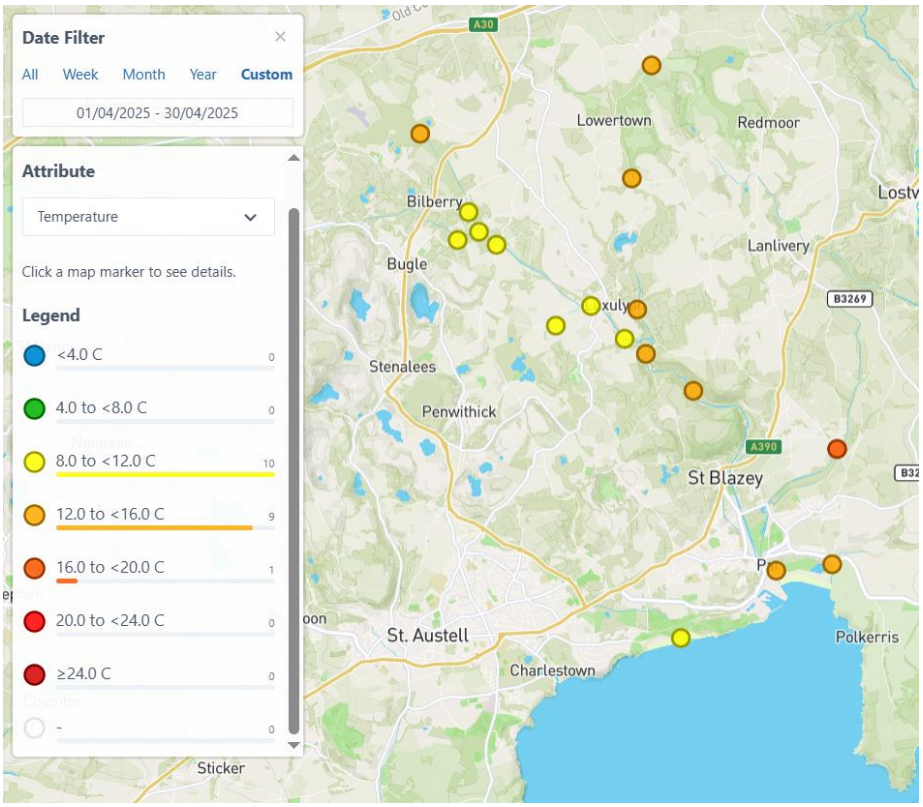
The times have been included in the previous table in case that explains some of the variations in readings.

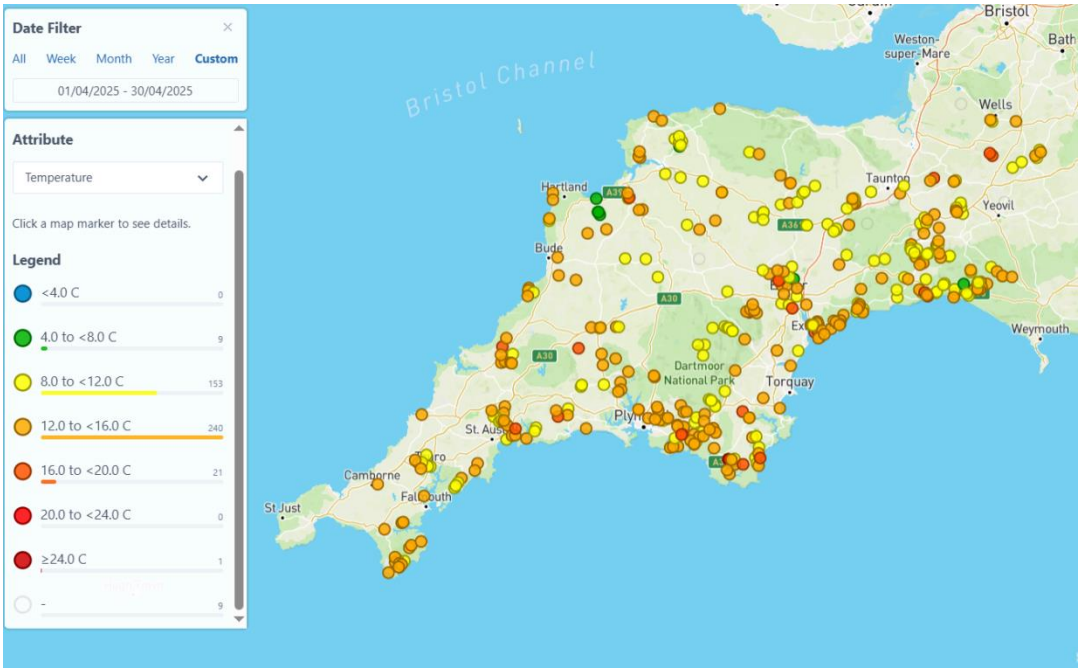
D. TEMPERATURE

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 April 2025

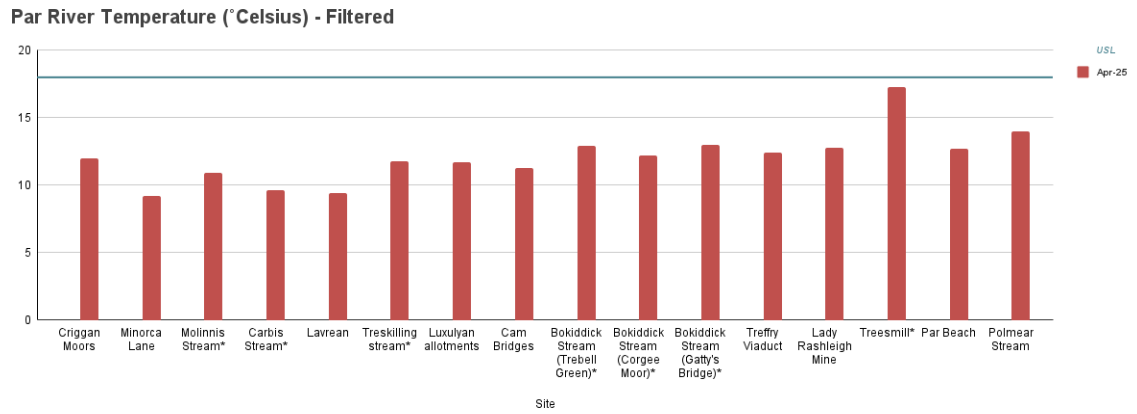
Results above the temperature at which fish and other organisms can function healthily will be shown in red. At present, 18 ˚Celsius is being used as the upper safe limit for fish and other creatures, although 20˚ Celsius has been suggested by WRT instead. The Yealm Estuary to Moor Project (YEM) in Devon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

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

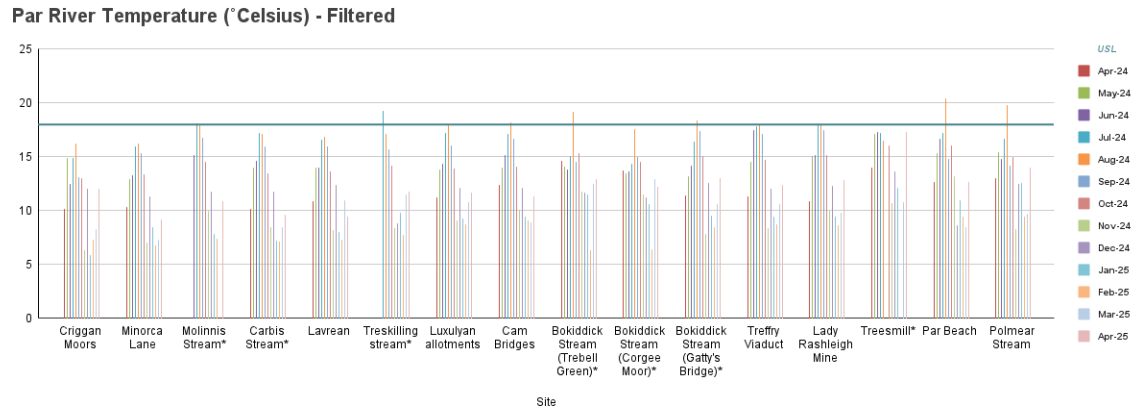
PAR RIVER/TRIBUTARY	LOCATION	Temperature ˚Celsius
Par	Criggan Moors, Par River, SX 01882 61133	12
Par	South of Minorca Lane, Par River, SX 02657 59788	9.2
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271	10.9
Tributary	Carbis Stream SX 02834 59401	9.6
Par	Lavrean, Par River SX 03134 59164	9.4
Tributary	Treskilling, Treskilling Stream, SX 04107 57726	11.8
Par	Luxulyan allotments, Par River, SX 04732 58045	11.7
Par	Cam Bridges, Par River, SX 05292 57454	11.3
Tributary	Trebell Green, Bokiddick Stream SX 0551960226	12.9
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167	12.2
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953	13
Par	Treffry Viaduct, Par River, SX 05650 57179	12.4
Par	Lady Rashleigh Mine, Par River, SX 06451 56509	12.8
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385	17.3
Par	Par Beach slipway, SX 0776 53261	12.7
Tributary	Polmear Stream, Ship Inn, SX 08749 53417	14

3. Graphs

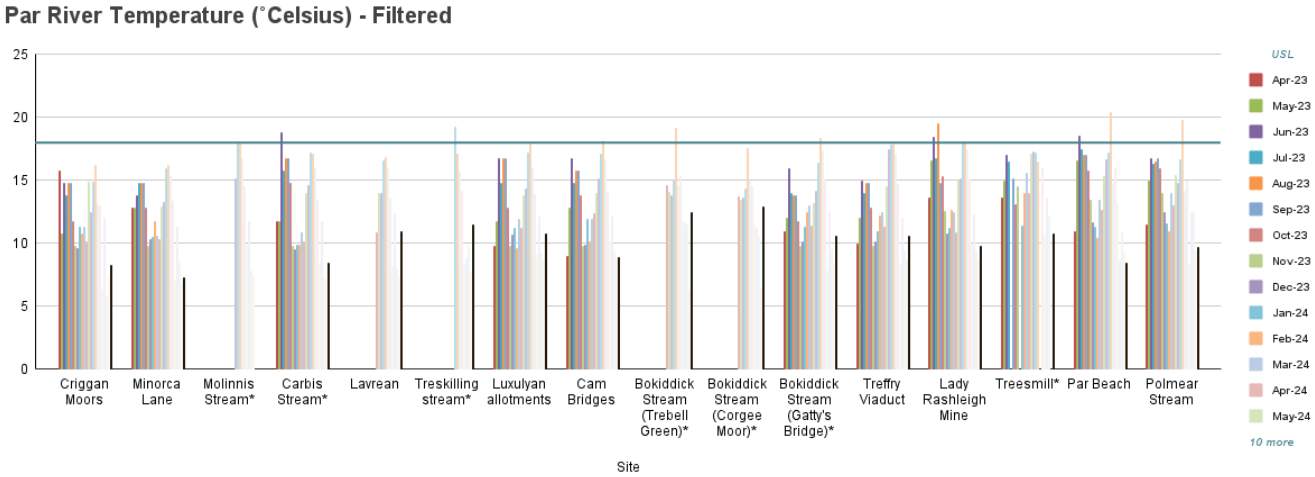
(a) This month:



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



(c) From 1st April 2023 until 30th April 2025

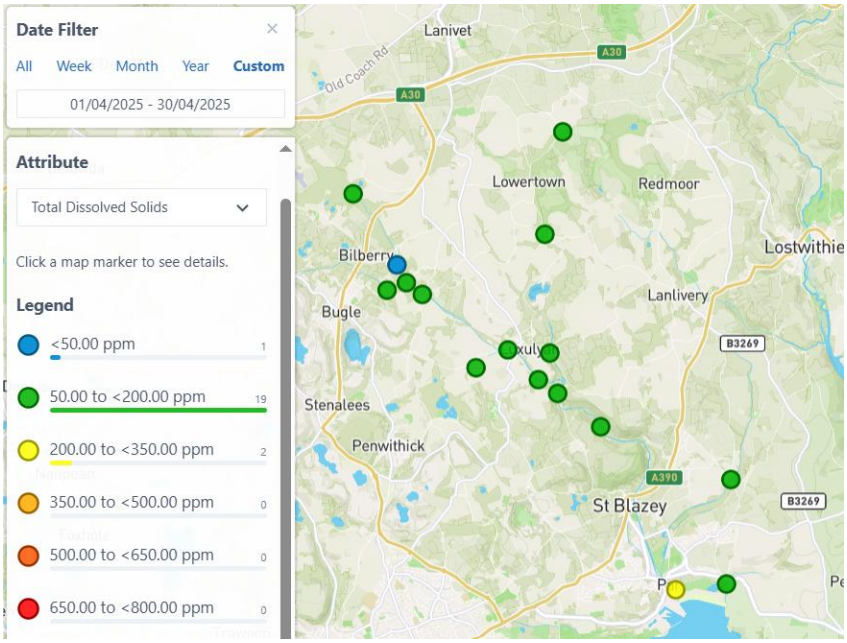


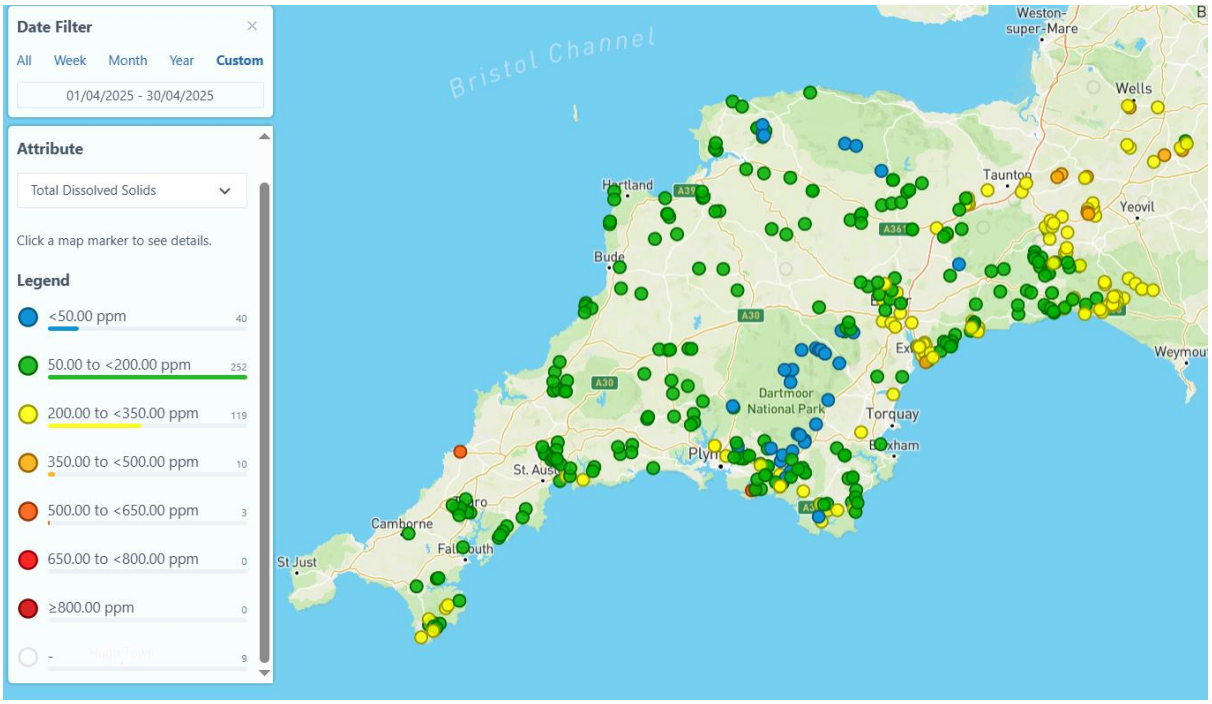
E. TOTAL DISSOLVED SOLIDS

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.



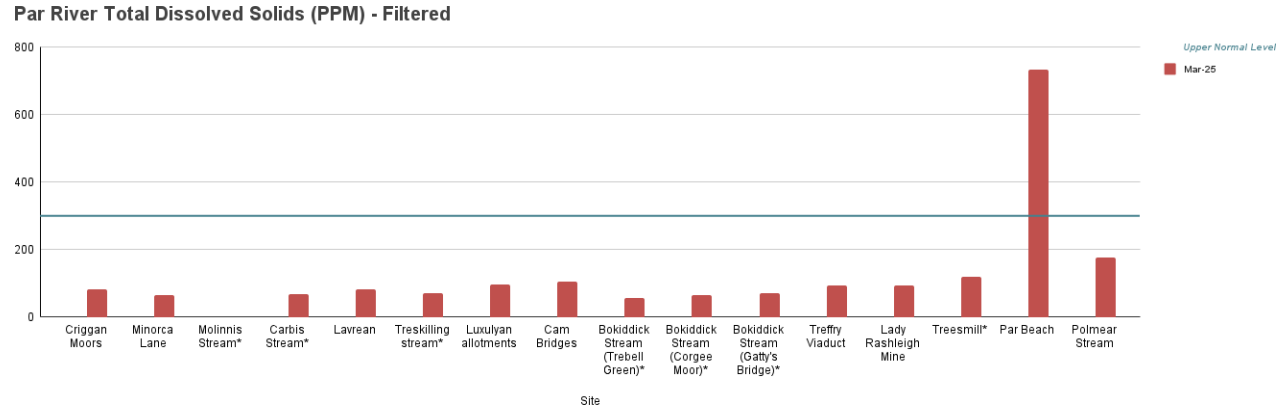


2. Results April 2025

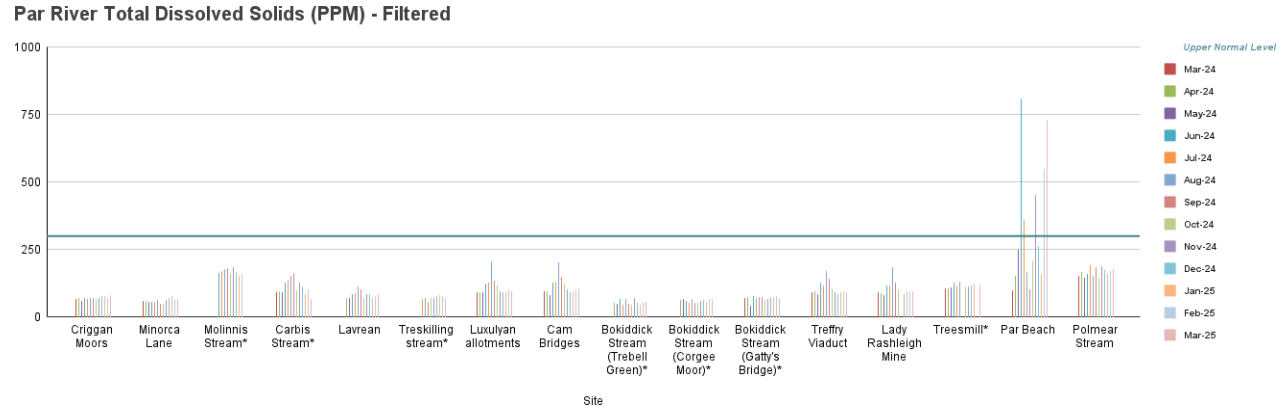
PAR RIVER/TRIBUTARY	LOCATION	Total Dissolved Solids PPM
Par	Criggan Moors, Par River, SX 01882 61133	65
Par	South of Minorca Lane, Par River, SX 02657 59788	48
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271	115
Tributary	Carbis Stream SX 02834 59401	60
Par	Lavrean, Par River SX 03134 59164	50
Tributary	Treskilling, Treskilling Stream, SX 04107 57726	69
Par	Luxulyan allotments, Par River, SX 04732 58045	60
Par	Cam Bridges, Par River, SX 05292 57454	67
Tributary	Trebell Green, Bokiddick Stream SX 0551960226	50
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167	60
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953	50
Par	Treffry Viaduct, Par River, SX 05650 57179	66
Par	Lady Rashleigh Mine, Par River, SX 06451 56509	61
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385	108
Par	Par Beach slipway, SX 0776 53261	220
Tributary	Polmear Stream, Ship Inn, SX 08749 53417	168

3. Graphs

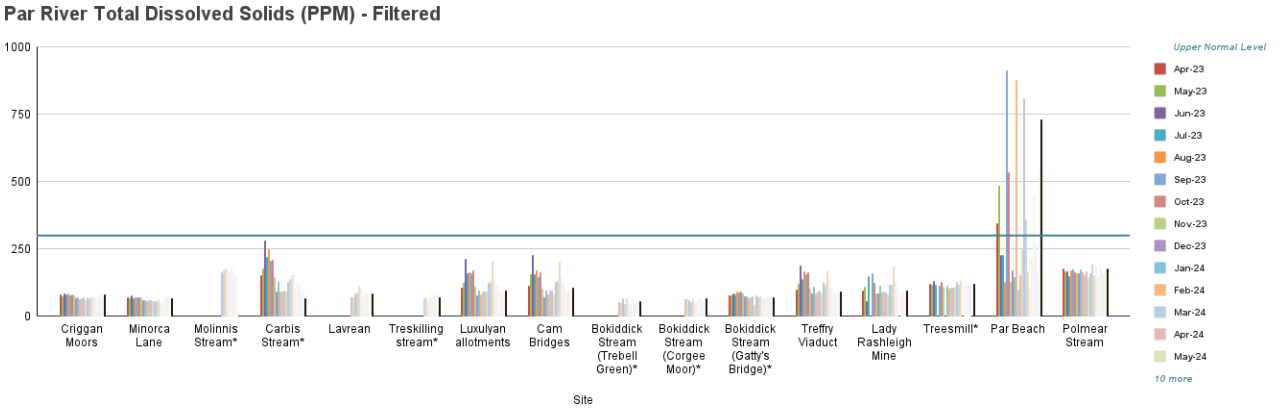
(a) This month:



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



(c) From 1st April 2023 until 30th April 2025



F. TURBIDITY

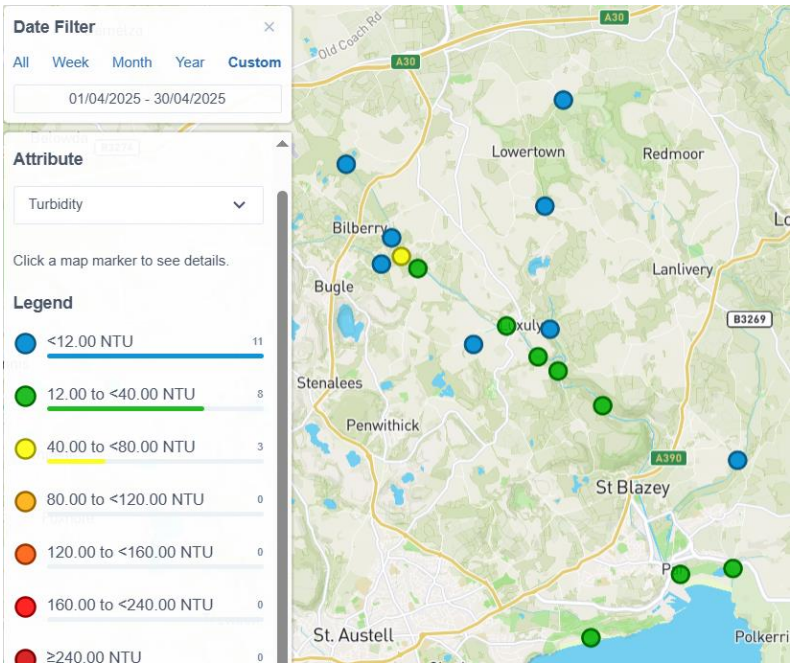
1. This is the WRT explanation of this measure:

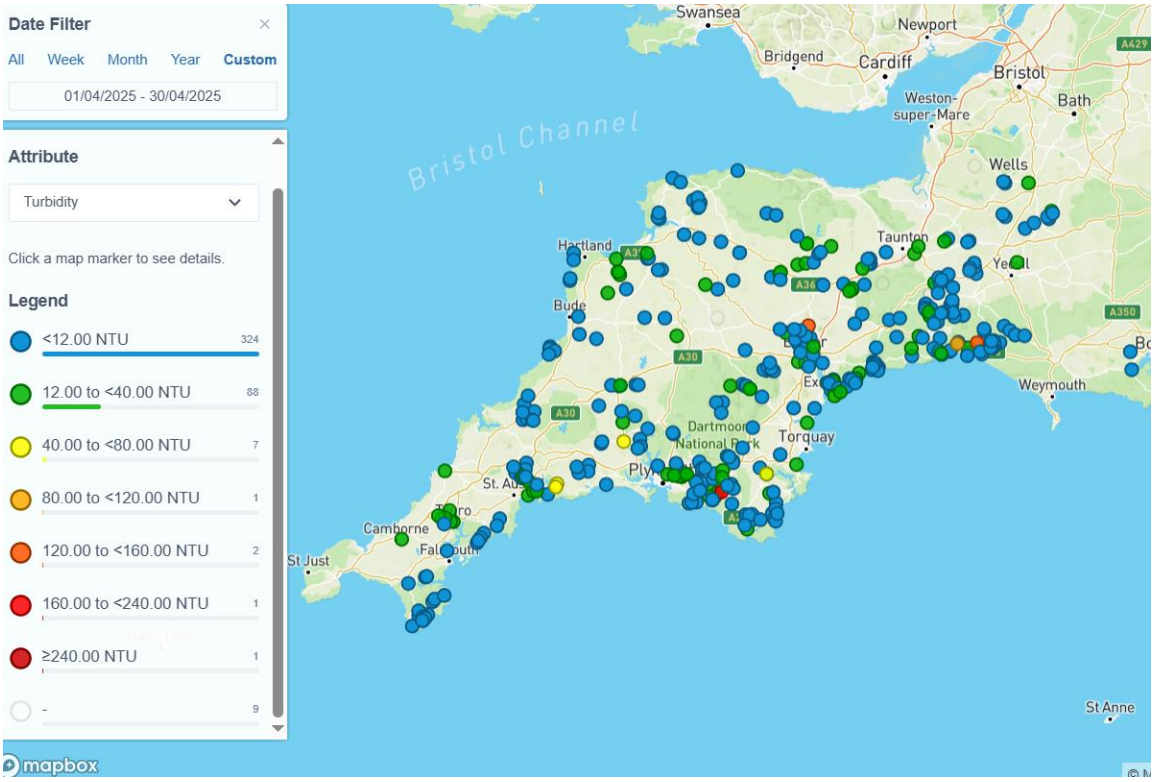
Turbidity tube is a measure of the optical clarity of the water. The more suspended particles in the water the lower the clarity and the higher the turbidity. You will often find your waterbody gets more turbid after heavy rainfall due to soil running off the fields and sediment being mixed into the 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 April 2025:

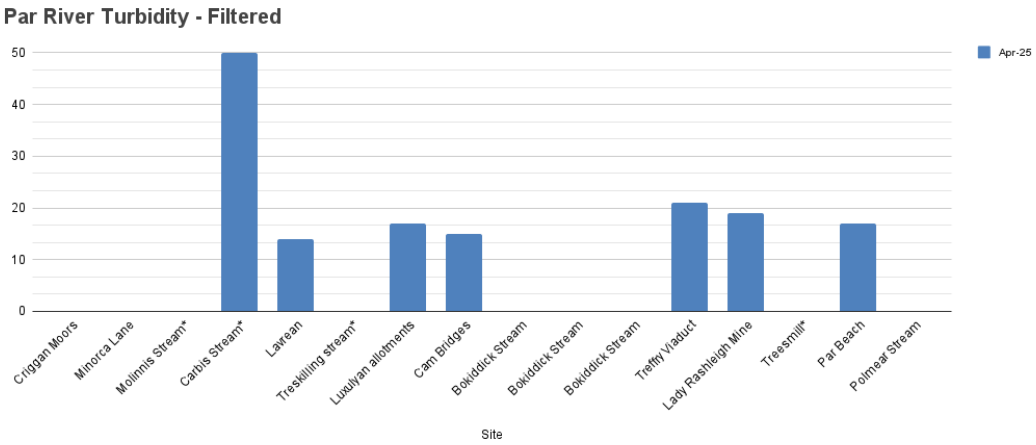
PAR RIVER/TRIBUTARY	LOCATION	Turbidity (NTU)
Par	Criggan Moors, Par River, SX 01882 61133	<12
Par	South of Minorca Lane, Par River, SX 02657 59788	<12
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271	<12
Tributary	Carbis Stream SX 02834 59401	<12
Par	Lavrean, Par River SX 03134 59164	14
Tributary	Treskilling, Treskilling Stream, SX 04107 57726	<12
Par	Luxulyan allotments, Par River, SX 04732 58045	17
Par	Cam Bridges, Par River, SX 05292 57454	15
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	21
Par	Lady Rashleigh Mine, Par River, SX 06451 56509	19
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385	<12
Par	Par Beach slipway, SX 0776 53261	17
Tributary	Polmear Stream, Ship Inn, SX 08749 53417	17


Date Filter
All Week Month Year Custom
01/04/2025 - 30/04/2025
Attribute
Turbidity
Click a map marker to see details.
Legend
<12.00 NTU 11
12.00 to <40.00 NTU 8
40.00 to <80.00 NTU 3
80.00 to <120.00 NTU 0
120.00 to <160.00 NTU 0
160.00 to <240.00 NTU 0
≥240.00 NTU 0
Lowertown
Redmoor
Bilberry
Bugle
Lanlivery
Stenalees
Penwithick
St Blazey
St. Austell
Polkerri
A30
A390
B3269

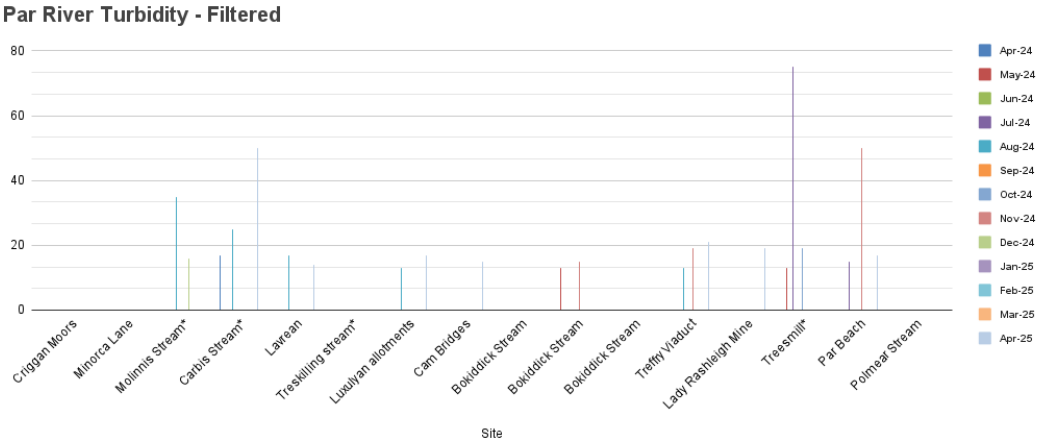

Date Filter
All Week Month Year Custom
01/04/2025 - 30/04/2025
Attribute
Turbidity
Click a map marker to see details.
Legend
<12.00 NTU 324
12.00 to <40.00 NTU 88
40.00 to <80.00 NTU 7
80.00 to <120.00 NTU 1
120.00 to <160.00 NTU 2
160.00 to <240.00 NTU 1
≥240.00 NTU 1
- 9
Bristol Channel
Swansea
Newport
Bridgend
Cardiff
Bristol
Bath
Weston-super-Mare
Wells
Taunton
Hartland
Bude
Torquay
Dartmoor National Park
Weymouth
Camborne
St Just
St Anne
A30
A36
A350
A429
mapbox

3. Graphs

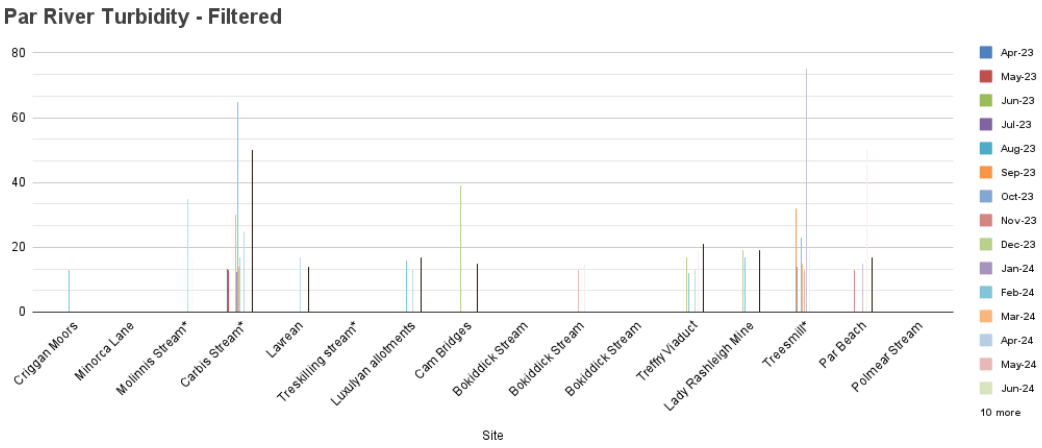
(a) This month



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



(c) From 1st April 2023 until 30th April 2025



G. 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

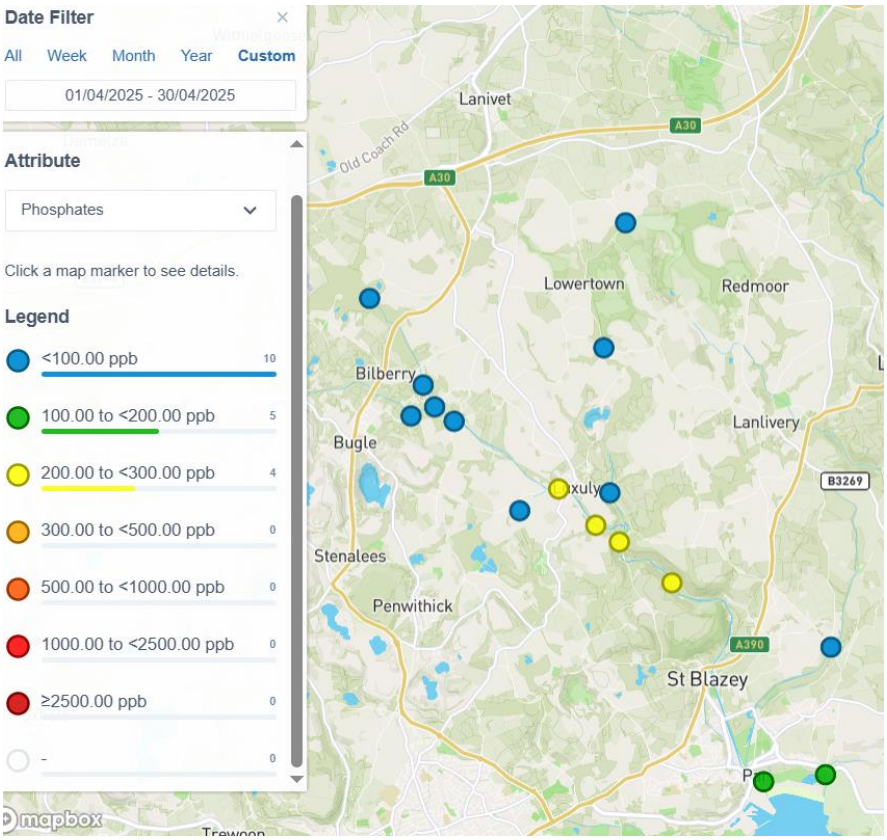
200 – 300 HIGH

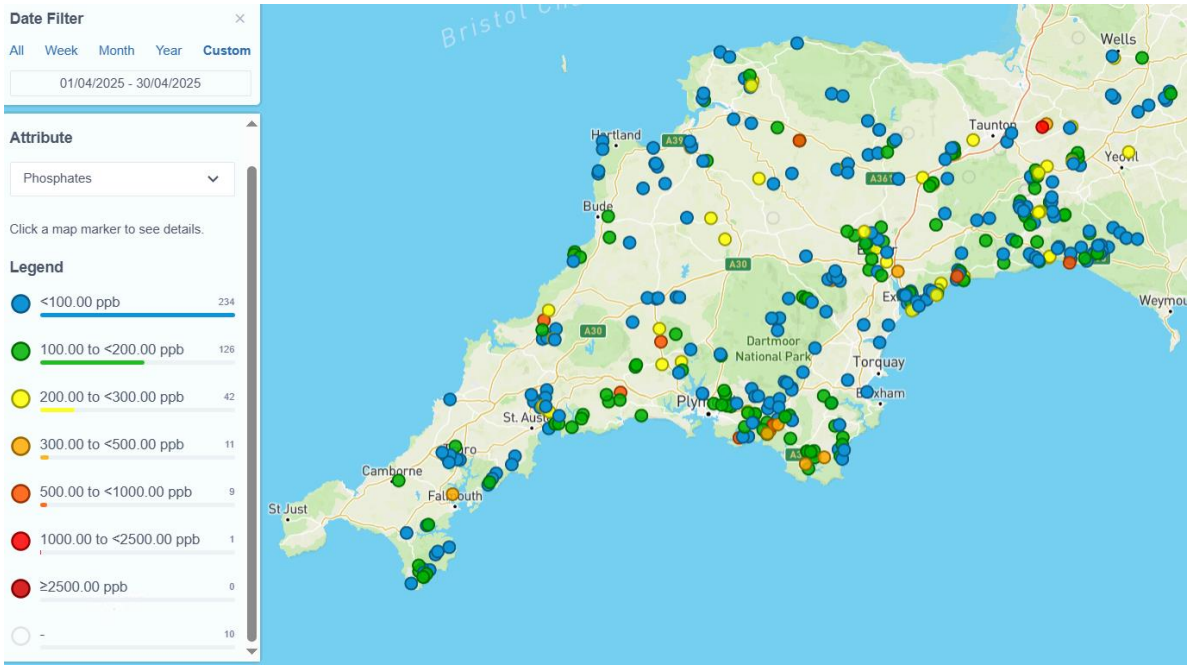
500 – 2500 – TOO HIGH

2. Results April 2025

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

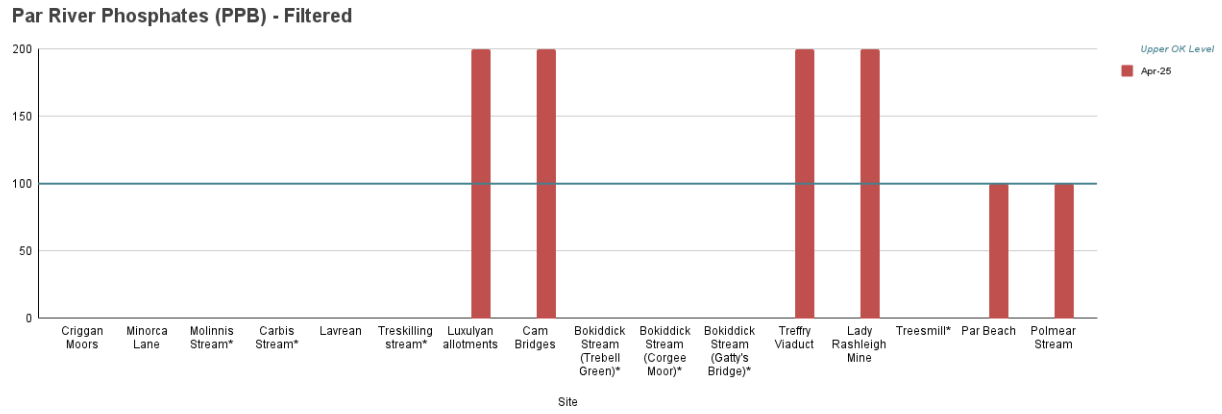
PAR RIVER/TRIBUTARY	LOCATION	Phosphates PPB
Par	Criggan Moors, Par River, SX 01882 61133	0
Par	South of Minorca Lane, Par River, SX 02657 59788	0
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271	0
Tributary	Carbis Stream SX 02834 59401	0
Par	Lavrean, Par River SX 03134 59164	0
Tributary	Treskilling, Treskilling Stream, SX 04107 57726	0
Par	Luxulyan allotments, Par River, SX 04732 58045	**200**
Par	Cam Bridges, Par River, SX 05292 57454	**200**
Tributary	Trebell Green, Bokiddick Stream SX 0551960226	0
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167	0
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953	0
Par	Treffry Viaduct, Par River, SX 05650 57179	**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	100
Tributary	Polmear Stream, Ship Inn, SX 08749 53417	100


Date Filter
All Week Month Year Custom
01/04/2025 - 30/04/2025
Attribute
Phosphates
Click a map marker to see details.
Legend
<100.00 ppb 10
100.00 to <200.00 ppb 5
200.00 to <300.00 ppb 4
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
Lanivet
Lowertown
Redmoor
Bilberry
Bugle
Lanlivery
Stenalees
Penwithick
St Blazey
A30
A390
B3269
mapbox

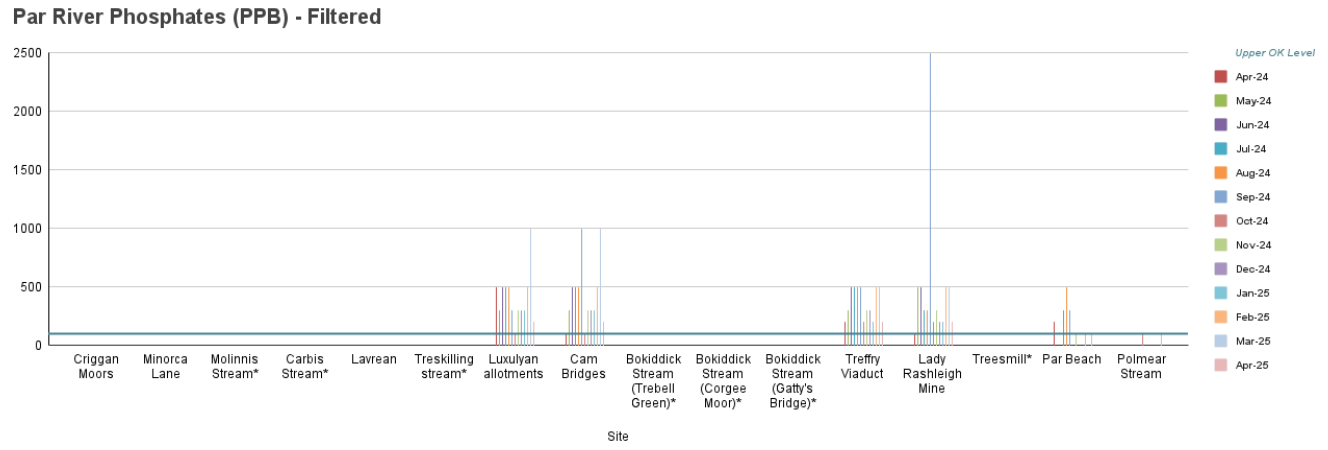

Date Filter
All Week Month Year Custom
01/04/2025 - 30/04/2025
Attribute
Phosphates
Click a map marker to see details.
Legend
<100.00 ppb 234
100.00 to <200.00 ppb 126
200.00 to <300.00 ppb 42
300.00 to <500.00 ppb 11
500.00 to <1000.00 ppb 9
1000.00 to <2500.00 ppb 1
≥2500.00 ppb 0
- 10
Hartland
Bude
Camborne
St Just
Dartmoor National Park
Torquay
Taunton
Wells
A30
A39
A361

4. Graphs

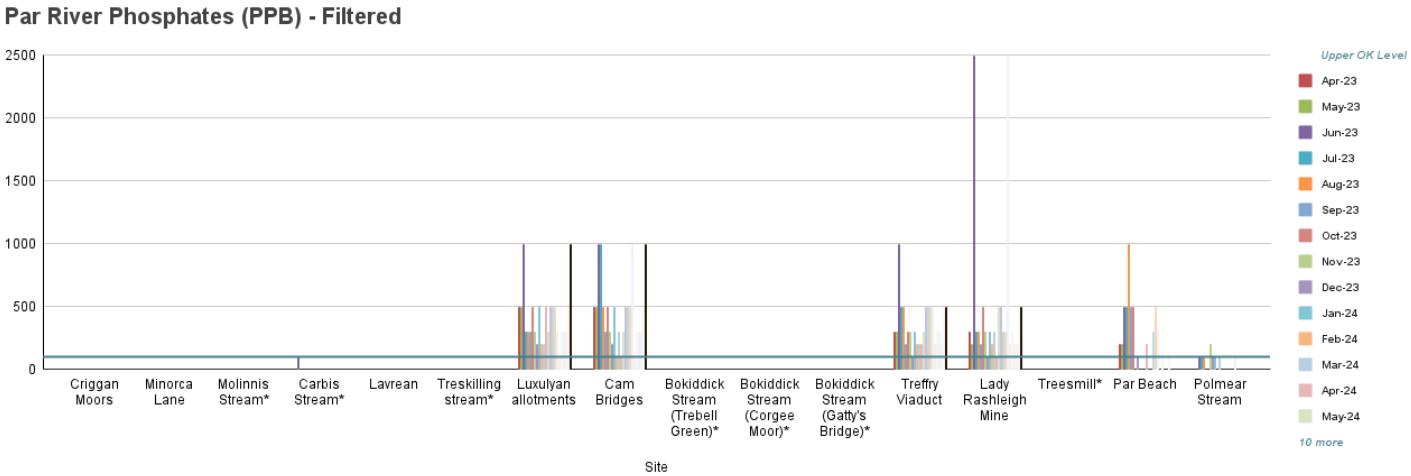
(a) This month:



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

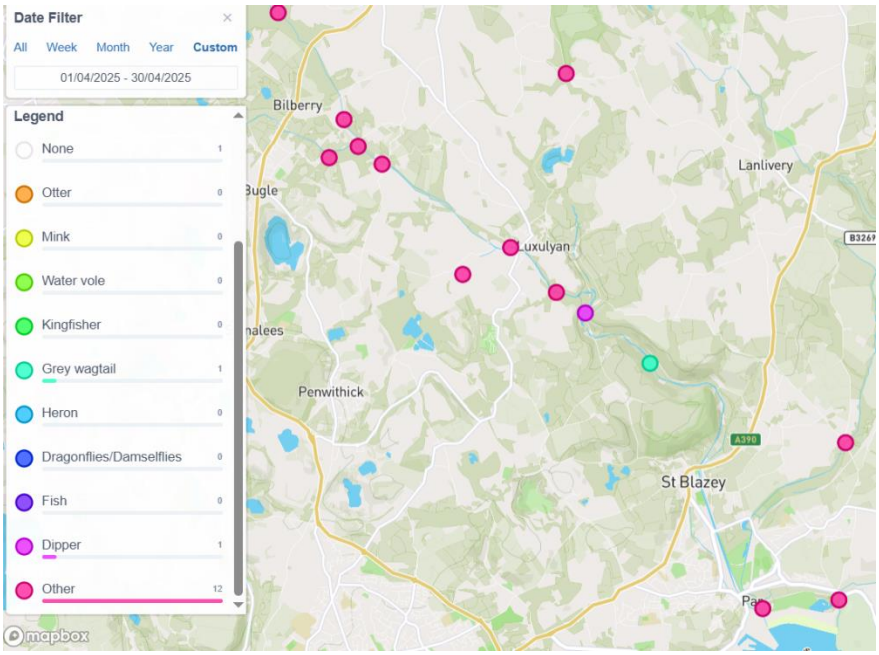


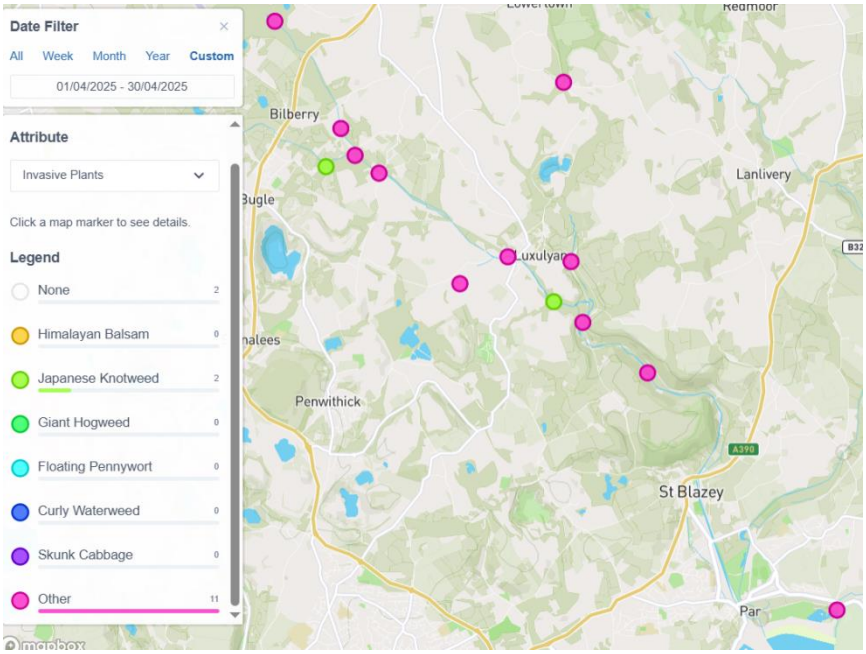
(c) From 1st April 2023 until 30th April 2025



H. WILDLIFE & INVASIVE PLANTS

Wildlife & Invasive Plants sightings at the monitoring points included:



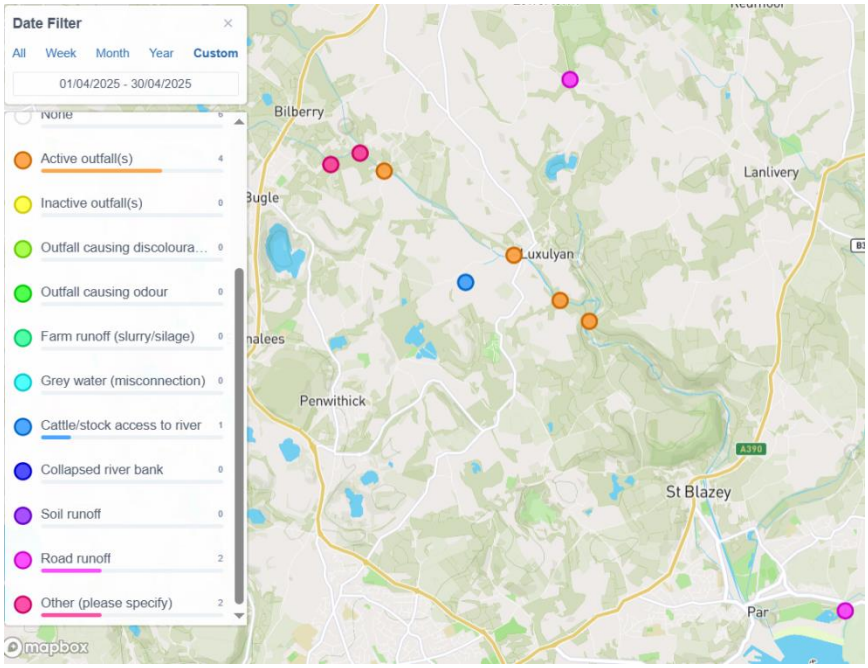


LOCATION	WILDLIFE NOTED	INVASIVE PLANTS NOTED
Criggan Moors, SX 01882 61133	**HEARD: Chaffinch, Wren, Blue Tit, Carrion Crow** **SEEN:**	Hemlock Water Dropwort
South of Minorca Lane, Par River, SX 02657 59788	**HEARD: Robin, Chaffinch, Wren, Grey Wagtail, Goldcrest** **SEEN:**	None
Forkandles Farm, Molinnis Stream, SX 02460 59271	**HEARD: Wren, Blue Tit, Chaffinch, Robin** **SEEN:**	Japanese Knotweed
Carbis Stream SX 02834 59401	**HEARD: Blackcap, Willow Warbler, Chaffinch, Wren, Robin, Great Tit, Blue Tit** **SEEN:**	Hemlock Water Dropwort
Lavrean, Par River SX 03134 59164	**HEARD: Robin** **SEEN: Jay, Pheasant**	None
Treskilling, Treskilling Stream, SX 04107 57726	**HEARD: Chiffchaff** **SEEN: Mallards**	Hemlock Water Dropwort
Luxulyan allotments, Par River, SX 04732 58045	**HEARD: Blue Tit, Blackbird, Robin, Great tit, Wren, Willow Warbler, Greenfinch, Dunnock, Woodpigeon, Jackdaw, Blackcap, Chaffinch** **SEEN:**	Hemlock Water Dropwort
Cam Bridges, Par River, SX 05292 57454	**HEARD: Wren, Chiffchaff** **SEEN: Fox**	Hemlock Water Dropwort, Japanese Knotweed
Trebell Green, Bokiddick Stream SX 0551960226	**HEARD: Chiffchaff, Blue Tit, Robin, Goldfinch, Willow Warbler** **SEEN: Lake created by beaver dam and gnawed trees.**	None
Corgee Moor, Bokiddick Stream SX 0593462167	**HEARD: Robin, Greater Whitethroat, Wren, Long-tailed Tit, Blue Tit, Bullfinch** **SEEN:**	Hemlock Water Dropwort
Gatty's Bridge, Bokiddick Stream SX 05531 57953	**HEARD:** **SEEN:**	Hemlock Water Dropwort
Treffry Viaduct, Par River, SX 05650 57179	**HEARD:** **SEEN:**	Hemlock Water Dropwort
Lady Rashleigh Mine, Par River, SX 06451 56509	**HEARD: Wren** **SEEN: Grey Wagtail**	Hemlock Water Dropwort
Treesmill, Tywardreath Stream, SX 08873 55385	**Robin, Wren, Blackbird, Chaffinch, Blue Tit, Great Tit, Coal Tit**	
Par Beach slipway, SX 0776 53261	**Cormorant, herring Gull**	None
Polmear Stream, Ship Inn, SX 08749 53417	**Blackbird**	Hemlock Water Dropwort

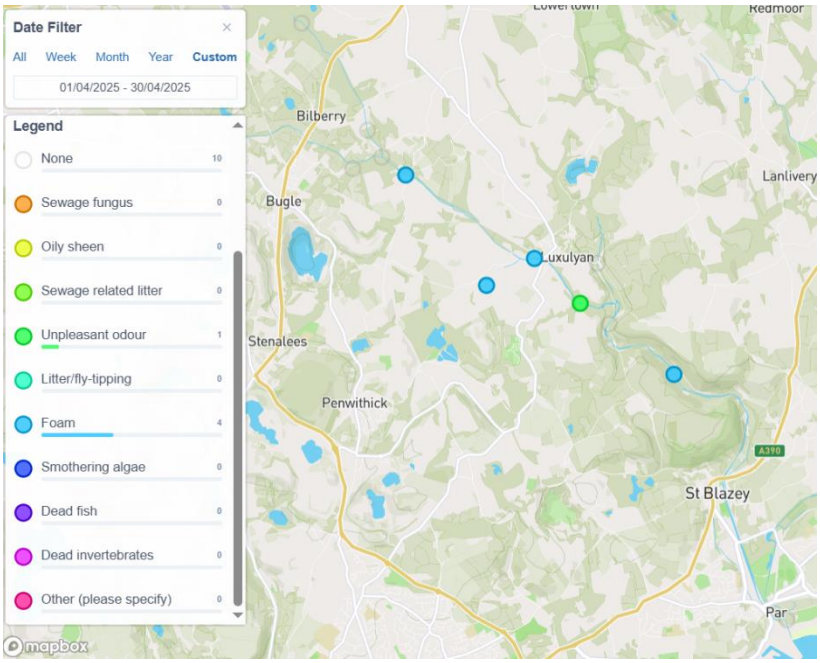
The Merlin Bird ID app has been used to identify birdsong (https://merlin.allaboutbirds.org/).

I. POLLUTION SOURCES AND EVIDENCE

1. Visible sources of pollution (source: Cartographer)



2. Recent evidence of pollution

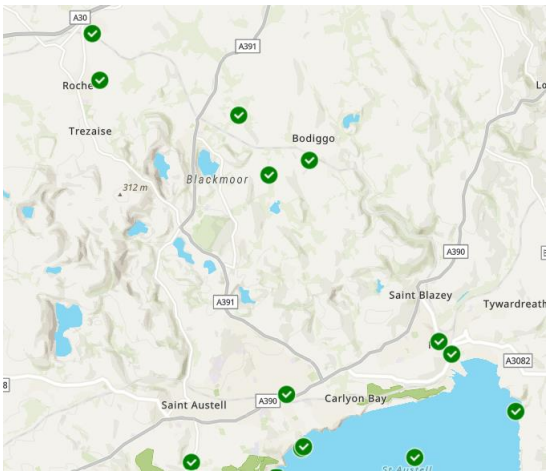


LOCATION	EVIDENCE OF RECENT POLLUTION
Criggan Moors, SX 01882 61133	None
South of Minorca Lane, Par River, SX 02657 59788	None
Forkandles Farm, Molinnis Stream, SX 02460 59271	None
Carbis Stream SX 02834 59401	None
Lavrean, Par River SX 03134 59164	Foam
Treskilling, Treskilling Stream, SX 04107 57726	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
Corgee Moor, Bokiddick Stream SX 0593462167	None
Gatty's Bridge, Bokiddick Stream SX 05531 57953	None
Treffry Viaduct, Par River, SX 05650 57179	None
Lady Rashleigh Mine, Par River, SX 06451 56509	Foam
Treesmill, Tywardreath Stream, SX 08873 55385	None
Par Beach slipway, SX 0776 53261	None
Polmear Stream, Ship Inn, SX 08749 53417	None

Foam has been recorded but this is not always the result of pollution. Often the amount of foam is small.

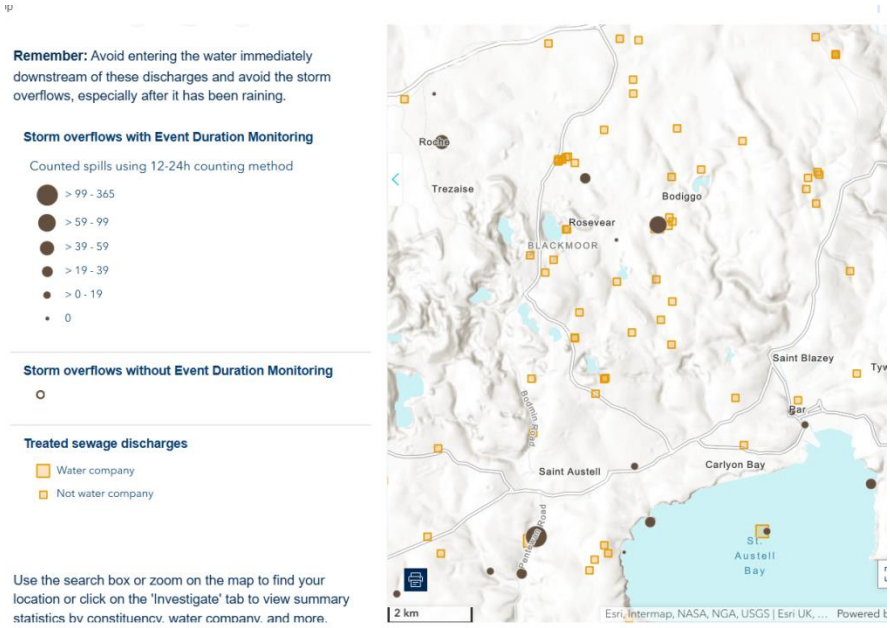
4. South West Water Storm Overflows

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



This screenshot is for illustrative purposes only and does not show the situation in March. Not all of the locations are in the Par River catchment either.

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



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

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

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

(c) SWW Storm Overflow spills

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)

(d) SWW Storm Overflow spills March 2025:

N.B. These times have been taken from The Rivers Trust's https://www.sewagemap.co.uk/ . This table has been compiled in good faith but may contain errors so should not be relied on: it is indicative only.

LOCATION/WATERCOURSE	SPILLAGES	TOTAL SPILLAGE DURATION MARCH 2025
Victoria pumping station overflow, Roche (SWW1266) Into Par River	**Started:** Mon 14 April 2:09 **Stopped:** Mon 14 April 2:11 **Duration:** 2 minutes **Started:** Friday 18th April 8:12 pm **Stopped:** Friday 18th April 8:48 pm **Duration:** 36 minutes **Started:** Tuesday 22nd April 9:18 pm **Stopped:** Tuesday 22nd April 9:23 pm **Duration:** 5 minutes	**43 minutes**
Molinnis storm overflow, Bugle (SWW0765) Into tributary of Par River	**Started:** Tuesday 15th April 9:26 **Stopped:** Tuesday 15th April 11:54 **Duration:** 2 hours 27 minutes	**>3 hours 25 minutes**

	Started: Friday 18th April 8:02 pm **Stopped:** **Unsure** **Started:** Tuesday 22nd April 9:08 pm **Stopped:** Tuesday 22nd April 10:06 pm **Duration:** 58 minutes	
Rescorla storm overflow, Luxulyan (SWW0987) Into 'Tributary of Par Sands (S)' [sic]	**Started:** **Stopped:**	**0**
Luxulyan sewage treatment works settled storm overflow, St Austell (SWW0694) Into Par River	**Started:** Tuesday 15th April 11:16 **Stopped:** Thursday 17th April 10:15 **Duration:** 46 hours 58 minutes **Started:** Friday 18th April 12:15 am **Stopped:** Sunday 20th April 12:29 pm **Duration:** 60 hours 14 minutes **Started:** Tuesday 22nd April 9:24 pm **Stopped:** Wednesday 23rd April 5 pm **Duration:** 19 hours 36 minutes	**126 hours 48 minutes.**
Tredenham Close storm overflow, Par (SWW1230) Into St Blazey stream	**Started:** **Stopped:**	**0**
Par No2 pumping station overflow, Par (SWW0519) Into Par River	**Started:** **Stopped:**	**0**

K. OUR GROUP AND SUPPORTERS

Monitoring is part of the Citizen Science programme run by the West Country Rivers Trust (WCRT) and is carried out monthly by volunteers, including Joan Farmer; Veronica Jones; Roger Smith; Simon Tagney; Maggie Tagney; and Brian Harrisson. They have received training from Lydia Ashworth, Junior Evidence and Engagement Officer of the West Country Rivers Trust (https://wrt.org.uk/project/become-a-citizen-scientist/). Results are logged on the Cartographer website. The support and advice given by Ross Tonkin, Lloyd Paynter, David Edwards, Claire and Gary Phillips, Jenny Heskett, Nick Taylor, Jeremy Roberts, Mat Bateman, Colin Pringle, Matt Healey, Simon Browning, Lydia Deacon, Jack Middleton, Anna Seal, Anna Crane, Zoe Connelly, Jade Neville, Lauren Jasper 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.

Report compiled by Roger Smith, 25th May 2025