MONITORING OF THE PAR RIVER AND ITS TRIBUTARIES

The monitoring group operates under the citizen science scheme run by the Westcountry Rivers Trust. Comments, opinions and errors in this report are those of the author(s) only.

JUNE 2026

CONTENT	PAGES

A. OUR JUNE 2026 FINDINGS AT A GLANCE (SEE SECTIONS C TO I FOR FULL PICTURE)

1. Data

We sampled at 16 locations between 10th and 14th June 2026. 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 (EXCLUDING TRESKILLING STREAM THIS MONTH) 6 TESTING LOCATIONS	TRIBUTARIES OF LOWER PAR (POLMEAR & TYWARDREATH STREAMS) 2 TESTING LOCATIONS
TEMPERATURE ˚ CELSIUS (SHOULD NOT EXCEED 18˚ CELSIUS)	Mean 13.64 Median 13.7 Min 12.7 Max 14.2	Mean 15.93 Median 15.2 Min 14 Max **18.6**	Mean 15.06 Median 14.2 Min 13.8 Max 17.4	Mean 14.4 Median 14.4 Min 14.2 Max 14.6
TOTAL DISSOLVED SOLIDS PPM (SHOULD NOT EXCEED 300 PPM)	Mean 88.4 Median 84 Min 53 Max 132	Mean **302.33** Median 117 Min 107 Max **683**	Mean 92 Median 63 Min 54 Max 182	Mean 140 Median 140 Min 110 Max 170
TURBIDITY (SHOULD BE <12 ON SECCHI TUBE. FOR AVERAGING ANY READING <12 IS COUNTED AS 0)	Mean 0 Median 0 Min 0 Max 0	Mean 0 Median 0 Min 0 Max 0	Mean 0 Median 0 Min 0 Max 0	Mean 0 Median 0 Min 0 Max 0
PHOSPHATES PPB (SHOULD NOT EXCEED 100 PPB)	Mean **300** Median 0 Min 0 Max **1000**	Mean **500** Median **500** Min **500** Max **500**	Mean 0 Median 0 Min 0 Max 0	Mean 0 Median 0 Min 0 Max 0
NITRATES (SHOULD NOT EXCEED 50 PPM)	n/a	0 at Par Beach slipway	n/a	0 on Polmear Stream
RIVERFLY SCORE (TRIGGER LEVEL AT LRM SHOULD BE ≥ 6)	Lady Rashleigh Mine (Lower Par) = **9** Tywardreath Stream = 8			
KEY WILDLIFE (WRT KEY SPECIES ONLY* – FOR FULL LIST SEE SECTION I)		Cased Caddis, Caseless Caddis, Flat-bodied Upwing, Olives, Gammarus (Par River). Cased Caddis, Caseless Caddis, Mayflies, Olives, Gammarus (Tywardreath Stream) Fish (Tywardreath Stream)	Beaver lake. Dragonflies	
INVASIVE PLANTS	Hemlock Water Dropwort, Japanese Knotweed	Hemlock Water Dropwort	Hemlock Water Dropwort, Japanese Knotweed	Hemlock Water Dropwort

***The WRT monitoring forms highlight: Water Vole; Heron; Dipper; Otter (live sighting); Kingfisher; Dragonflies/Damselflies; Mink; Grey Wagtail; Fish; 'Other' . Beavers aren't stipulated but could, for example, be considered a key species under 'Other'. It is in this latter category that indirect evidence of otters, such as spraint, is included.**

2. Key points

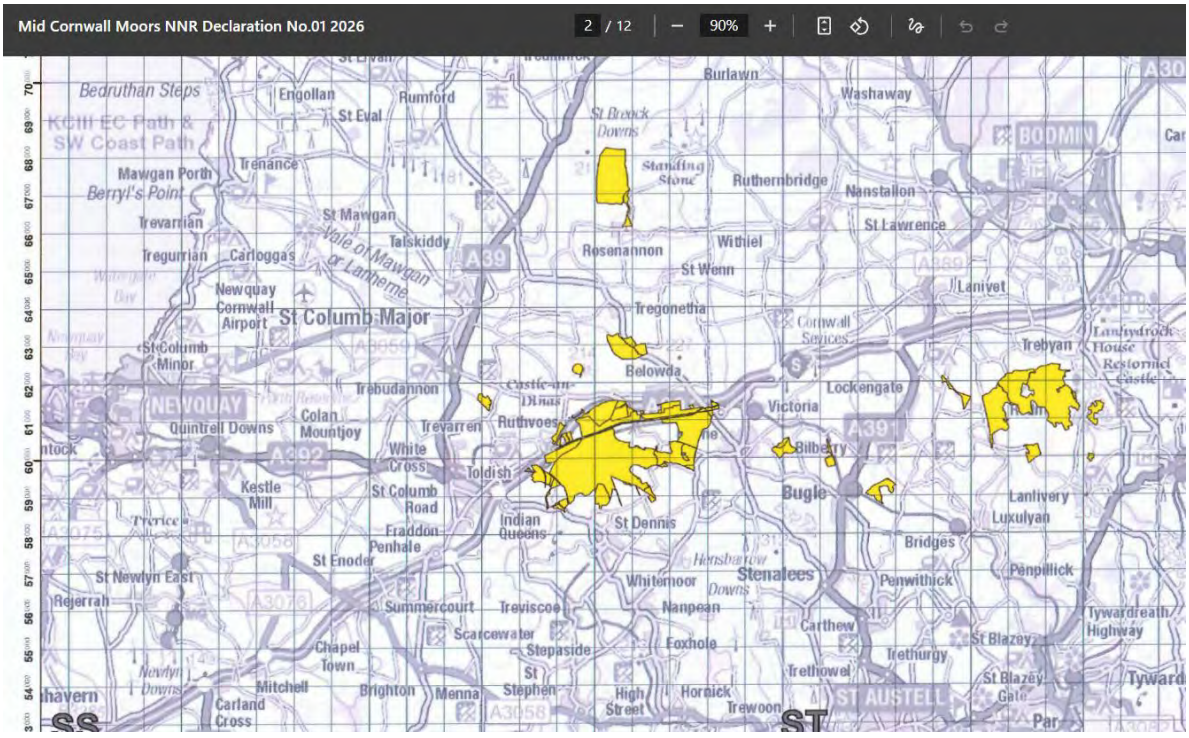
(a) Positive signs

(i) Both riverfly surveys (on the Lower Par River and Tywardreath Stream exceeded the trigger levels).

(ii) Fish were seen in the Tywardreath Stream.

(iii) At the location of the original (unauthorised) beaver introduction on the Upper Bokiddick Stream there appears to be an abundance of wildlife.

(iv) At the end of May, the new Mid-Cornwall Moors National Nature Reserve was announced. The eastern section lies within the Par River catchment:



Hopefully, there will be sufficient funding from central government to invest in boosting biodiversity.

(b) Points of concern

(i) As expected, low river levels are associated with high concentrations of phosphates.

(ii) The Total Dissolved Solids reading on the Par River at Par Beach were very high once again (one of the highest in the west country – see map page 20), even though the test was carried out at low tide.

(iii) One of the positive signs noted above was the sighting of fish on the Tywardreath Stream. It would be legitimate to ask why in a catchment of 4400.361 hectares fish were sighted only in one small tributary.

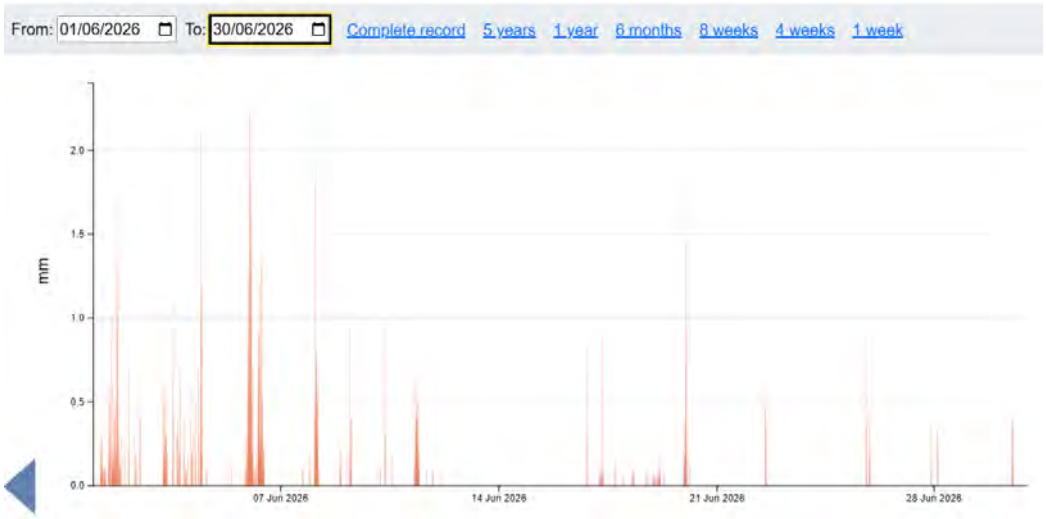
(c) Areas for further research

The range and concentrations of bacteria, the contributors, and the implications for river and marine life, as well as humans (at Par Beach in particular) is beginning to receive more attention.

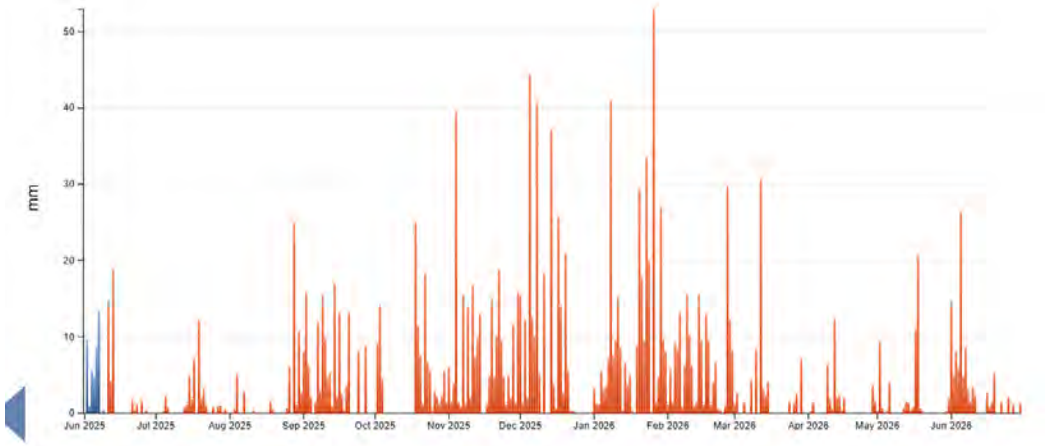
B. RAINFALL, RIVER LEVELS AND FLOW

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

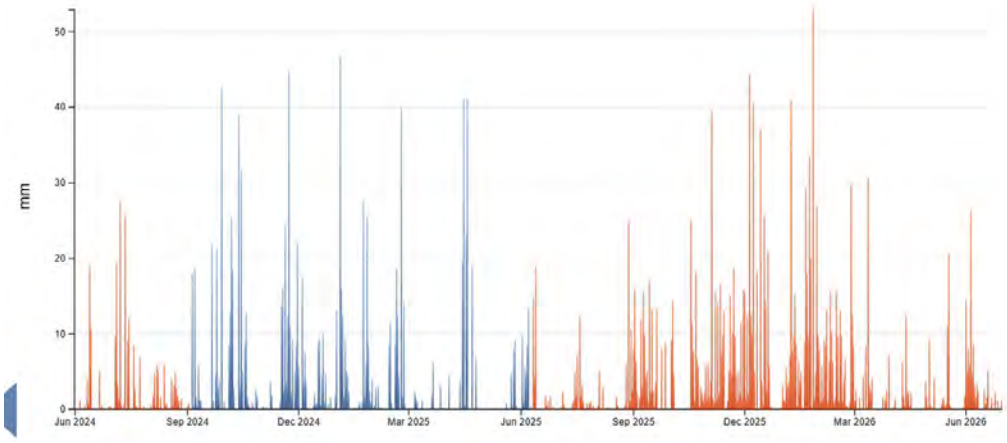
(a) June 2026



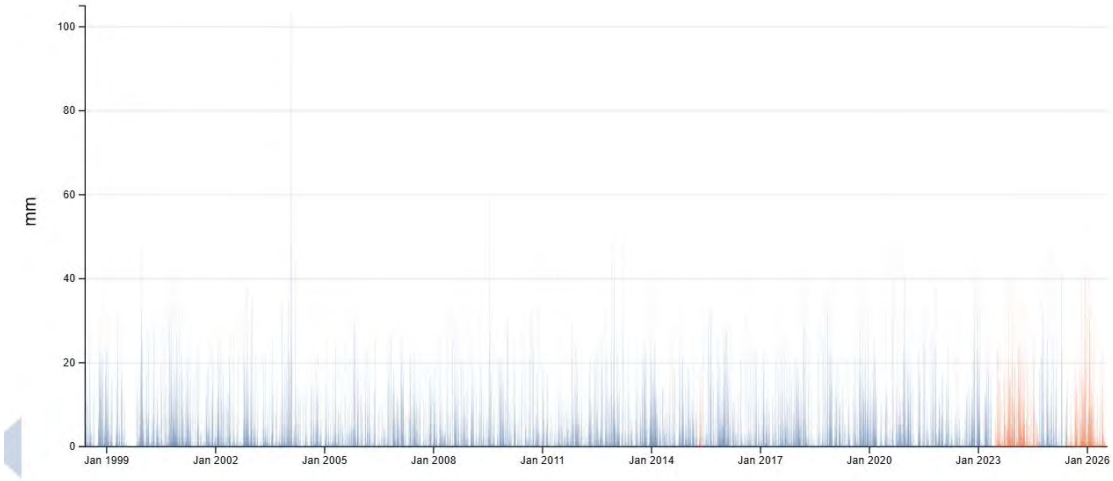
(b) From 1st June 2025 until 30th June 2026:



(c) From 1st June 2024 until 30th June 2026:

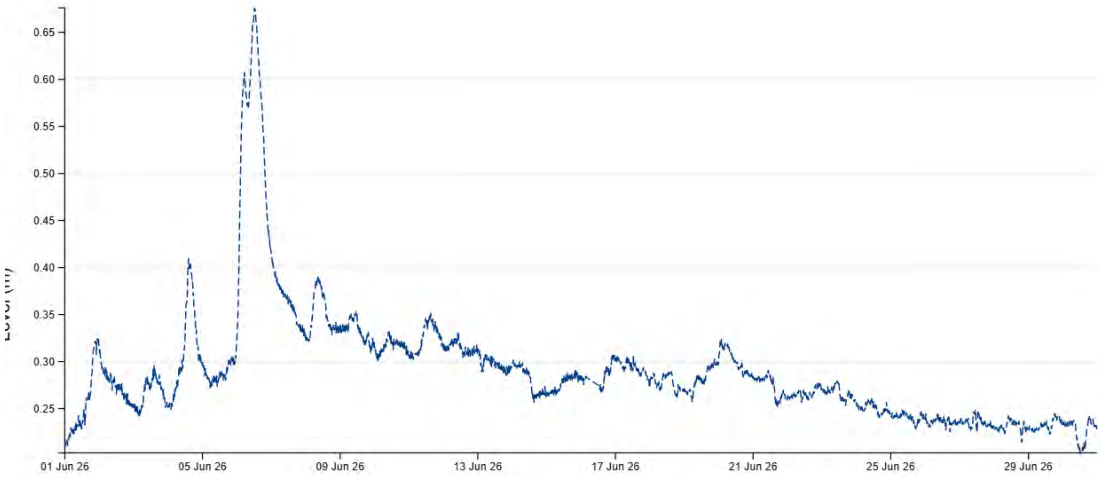


(d) Complete record:

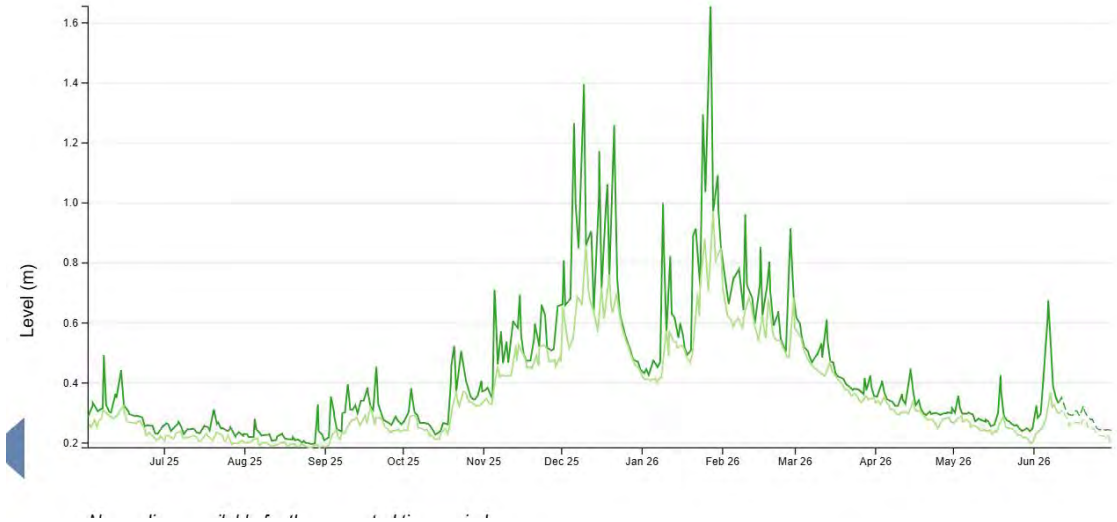


2. Par River levels at Luxulyan preceding and during surveys. Source: https://environment.data.gov.uk/hydrology/station/14aadf3c-3d4d-44b3-b26b-cf705827d00e

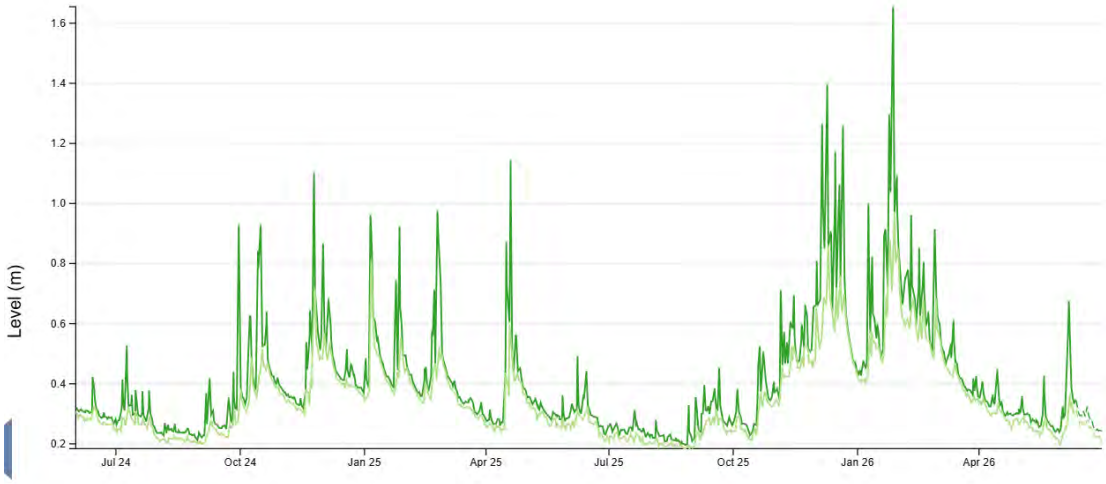
(a) June 2026



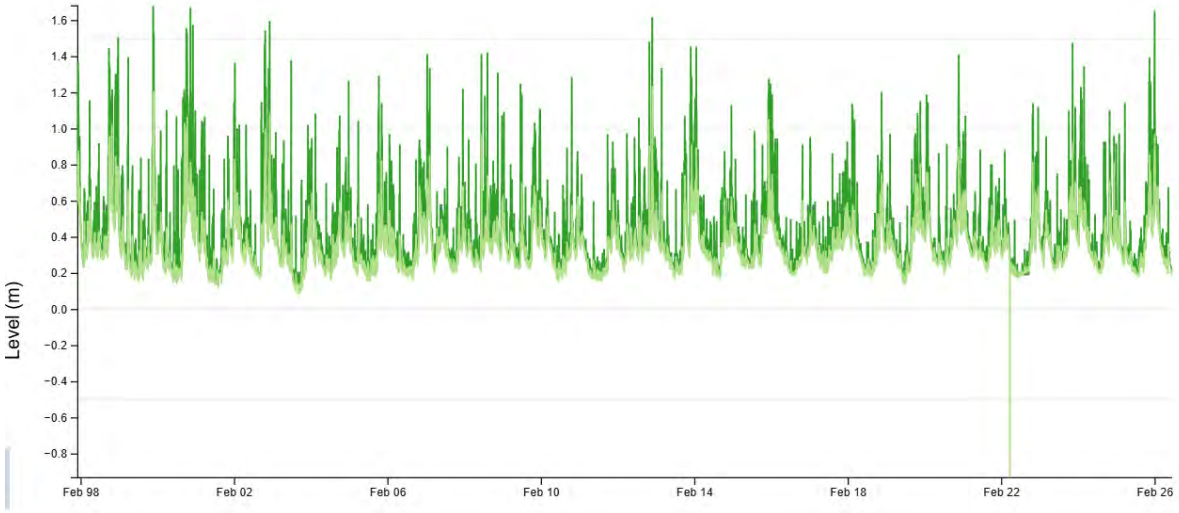
(b) From 1st June 205 until 30th June 2026



(c) From 1st June 2024 until 30th June 2026



(d) Complete record:

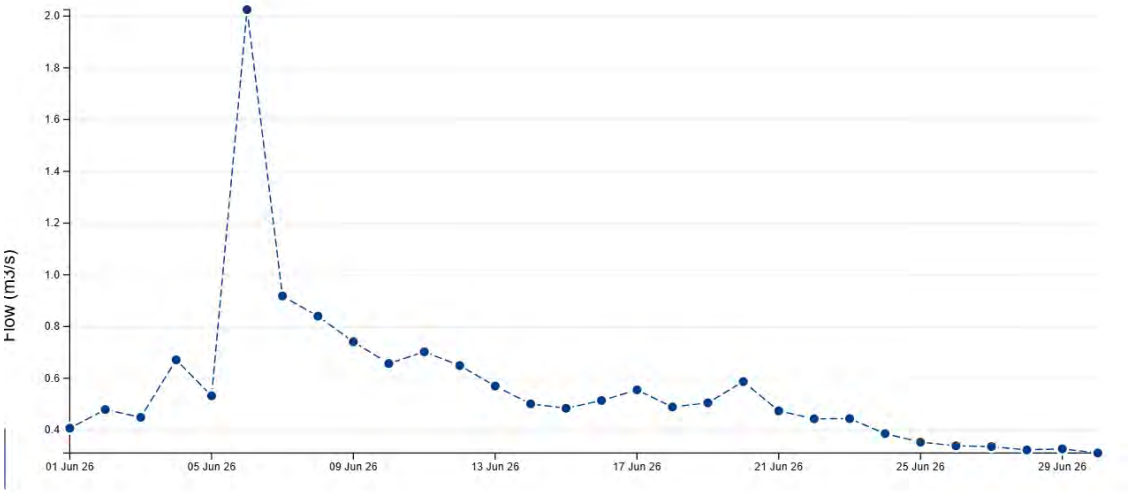


(e) How levels at Luxulyan could affect nearby areas:

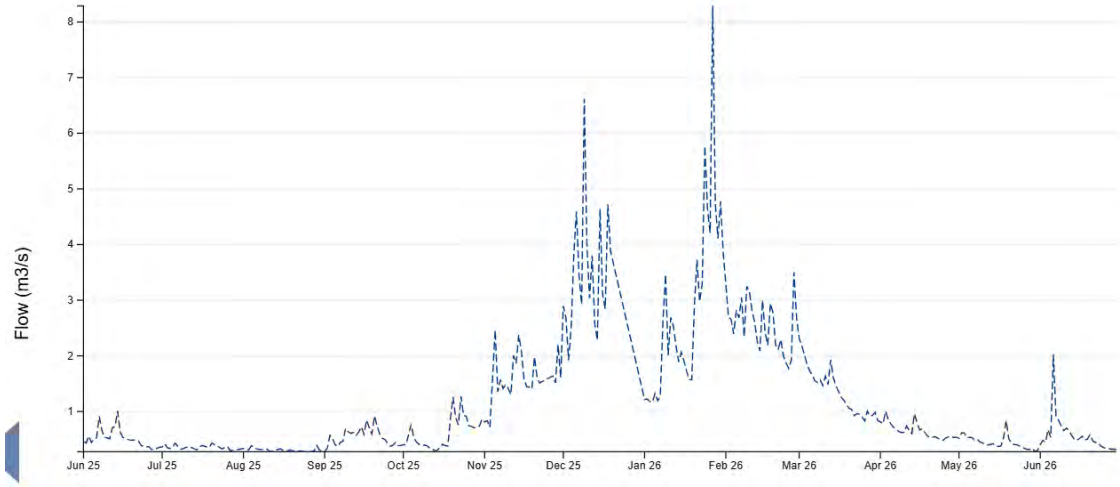
1.80m	Property flooding is possible above this level. One or more flood warnings may be issued
1.68m	Water reaches the highest level recorded at this measuring station (recorded on 19 December 1999)
1.40m	Low lying land flooding is possible above this level. One or more flood alerts may be issued
	This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

3. RIVER FLOW AT LUXULYAN (Daily Mean Flow in M3/s – cubic metres per second):
Source: https://environment.data.gov.uk/hydrology/station/d58ffa6f-8f0d-4626-b7a1-23de1774b470

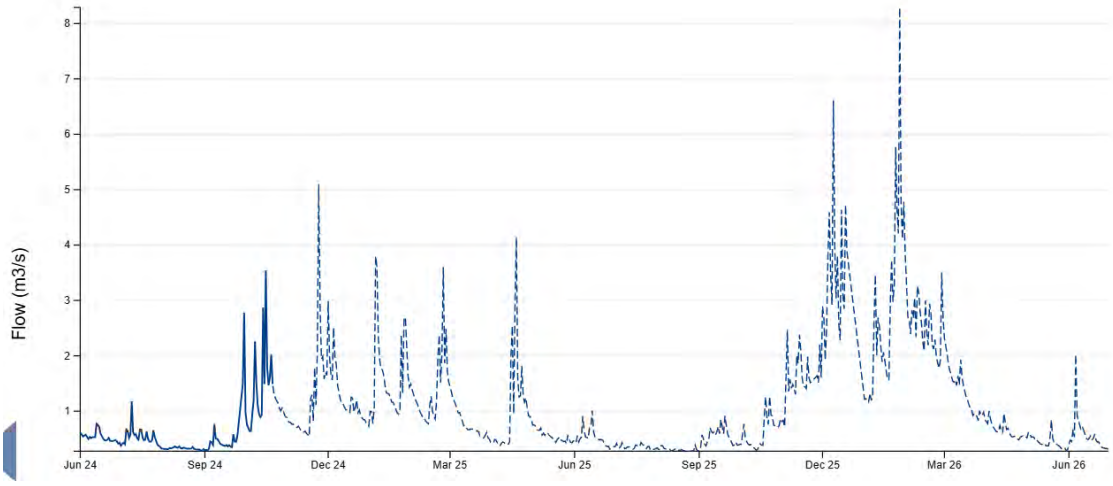
(a) June 2026



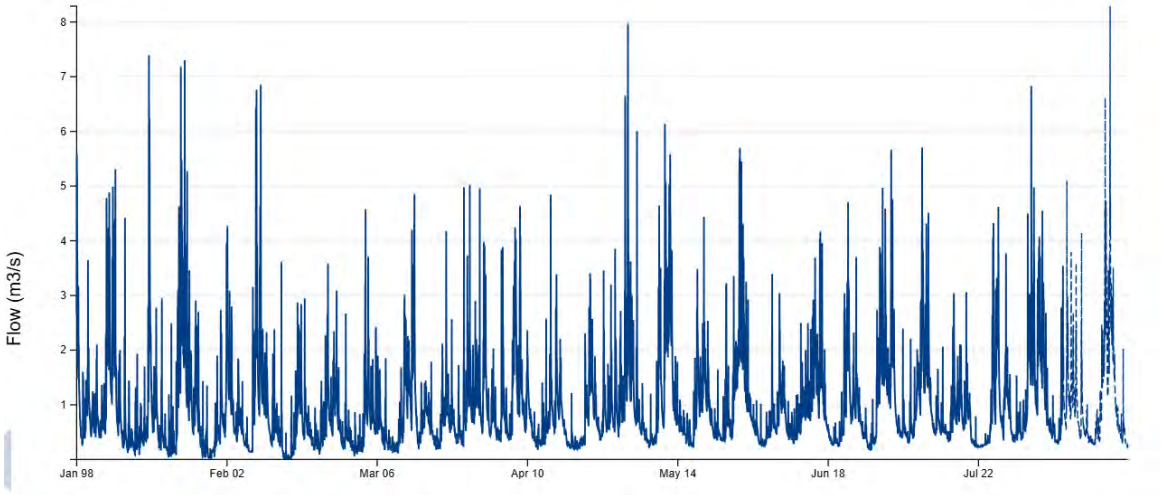
(b) From 1st June 2025 until 30th June 2026



(c) From 1st June 2024 until 30th June 2026



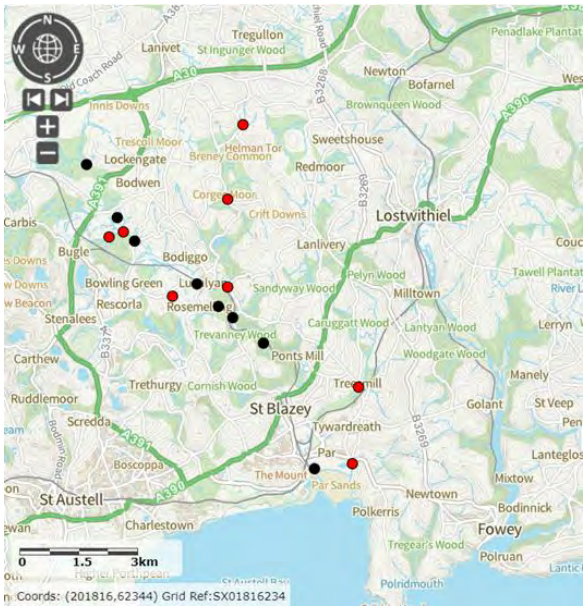
(d) Complete record



C. JUNE 2026 MONITORING POINTS

This month monitoring occurred at 16 locations.

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**	10/6/2026 8:45	CSI sampling. Cartographer record	Roger Smith
South of Minorca Lane, Par River, SX02668 59747	**PAR**	10/6/2026 8:00	CSI sampling. Cartographer record.	Roger Smith
Near Forkandles Farm, Molinnis Stream, SX 02460 59271	**SECONDARY TRIBUTARY (OF CARBIS STREAM)**	10/6/2026 9:35	CSI sample & Cartographer record.	Roger Smith
Carbis Stream SX 02834 59401	**TRIBUTARY**	10/6/2026 7:45	CSI sampling. Cartographer record.	Roger Smith
Lavrean, Par River SX 03134 59164	**PAR**	10/6/2026 9:55	CSI sampling. Cartographer record.	Roger Smith
Treskilling, Treskilling Stream, SX 04107 57726	**TRIBUTARY**	10/6/2026 10:35	CSI sampling. Cartographer record.	Roger Smith
Luxulyan allotments, Par River, SX 04732 58045	**PAR**	10/6/2026 10:55	CSI sampling. Cartographer record.	Roger Smith
Cam Bridges, Par River, SX 05292 57454	**PAR**	10/6/2026 11:25	CSI sampling. Cartographer record.	Roger Smith
Trebell Green, Bokiddick Stream SX 0551960226	**TRIBUTARY**	14/6/2026 14:35	CSI sampling. Cartographer record.	Roger Smith
Corgee Moor, Bokiddick Stream SX 0593462167	**TRIBUTARY**	14/6/2026 15:10	CSI sampling. Cartographer record.	Roger Smith
Gatty's Bridge, Bokiddick Stream SX 05531 57953	**TRIBUTARY**	10/6/2026 17:10	CSI sampling. Cartographer record.	Joan Farmer
Treffry Viaduct, Par River, SX 05650 57179	**PAR**	10/6/2026 16:40	CSI sampling. Cartographer record.	Joan Farmer
Lady Rashleigh Mine, Par River, SX 06451 56509	**PAR**	10/6/2026 14:30	CSI sampling. Cartographer record. Riverfly sampling.	Veronica Jones, Roger Smith, Joan Farmer, Deanna Earl
Treesmill, Tywardreath Stream, SX 08873 55385	**TRIBUTARY**	10/6/2026 12:15 15/6/2026 Riverfly	CSI sampling. Cartographer record. Riverfly.	Maggie Tagney Riverfly: Simon Tagney, Cathy Trodd
Par Beach slipway, SX 0776 53261	**PAR**	10/6/2026 12:00	CSI sampling. Cartographer record.	Brian Harrisson
Polmear Stream, Ship Inn SX 08749 53417	**TRIBUTARY**	10/6/2026 20:50	CSI sampling. Cartographer record.	Simon Tagney

D. THIS MONTH IN PICTURES

1. Roe deer near Lower Menadue:

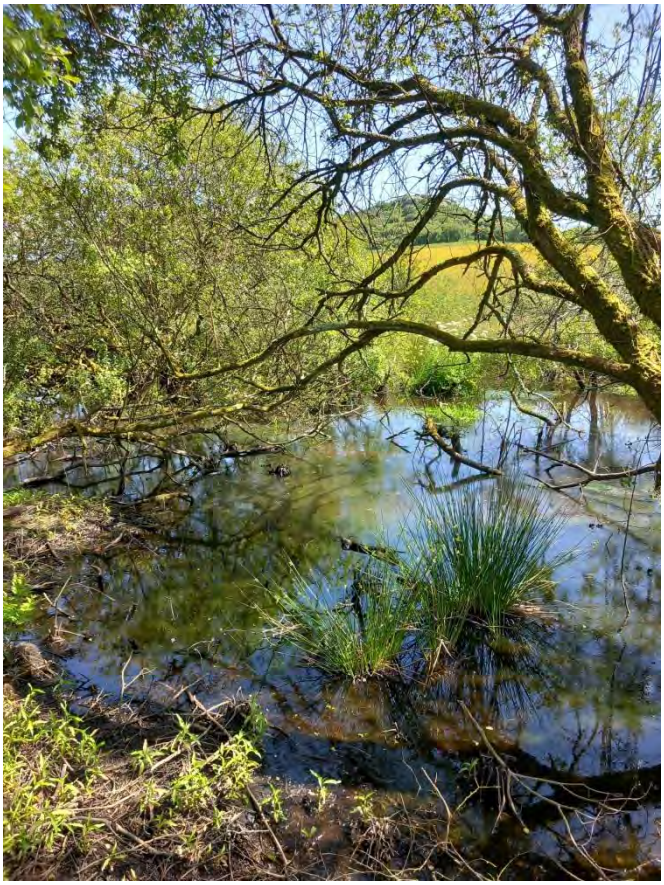
2. Ditch near Minorca Lane draining into Par River at SX 02653 59766. It is not shown on Cornwall Council's detailed river map (see picture 3).

3. The star shows where photo 2 was taken. The red line shows part of its course. The blue lines are mapped watercourses on Cornwall Council's website (https://experience.arcgis.com/experience/a3074c31108a43ada55e21e660bc043d/page/Page).

4. Broad-bodied Chaser dragonfly on the Bokiddick near Helman Tor:

More can be found at: https://british-dragonflies.org.uk/species/broad-bodied-chaser/ .

5. The lake created near Helman Tor by the first (unofficially introduced) beaver pair is teeming with life.



6. Low water on the Bokiddick Stream at Gatty's Bridge:

Photo: Joan Farmer

7. Riverfly emerging from its larval stage found during the riverfly survey on the Par River:

8. Abundant vegetation and low water on the Tywardreath Stream near Treesmill:

Photo: Maggie Tagney

9. Slow flow on the Polmear Stream

Photo: Simon Tagney

10. Heading to the sea. What is in the Par River as it reaches the sea at Par?

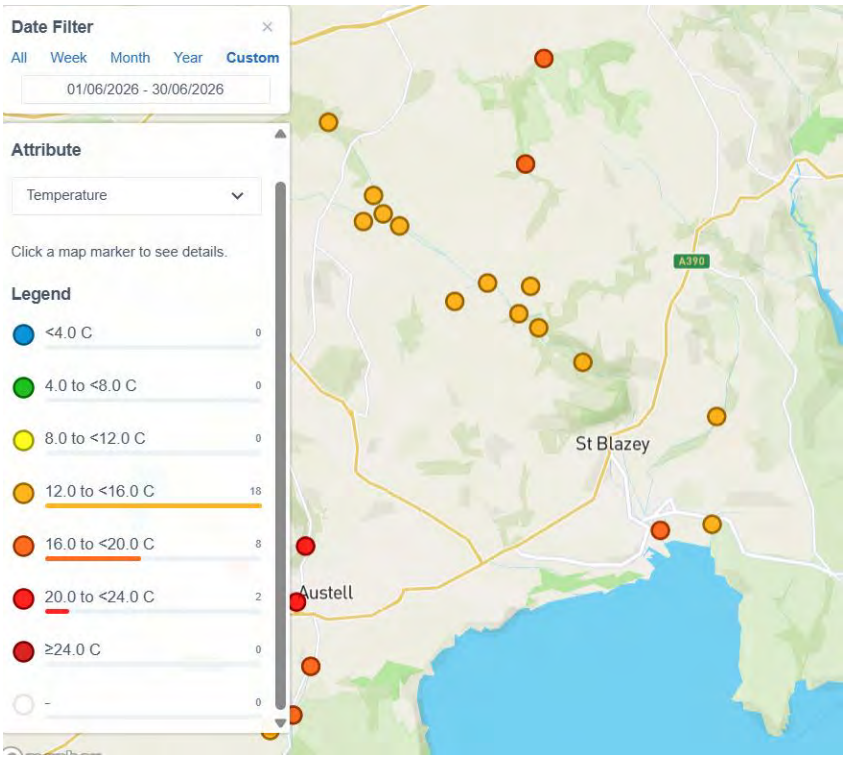
Photo: Brian Harrisson

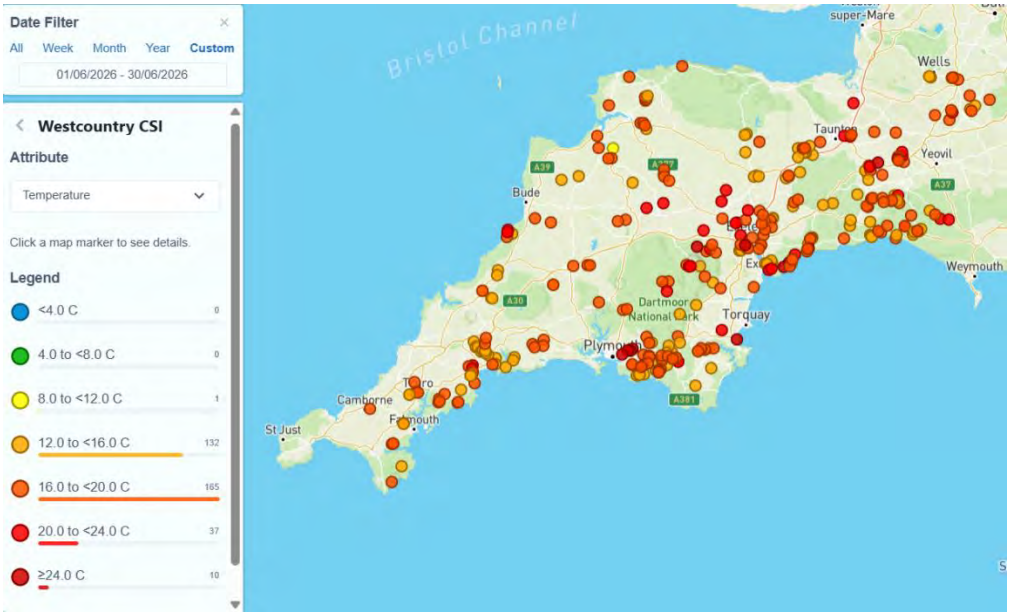
E. TEMPERATURE

1. This is the WRT's explanation of why this is monitored:

Temperature is a vital parameter within the river ecosystem. It controls many of the aquatic species life cycles. Temperature fluctuates with the seasons; however, you do get variation within that, particularly in small rivers and streams. Another important reason to measure temperature is to track the impact of our warming climate on our waterbodies.

Geographical comparison. Source: Cartographer.





Results June 2026

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.

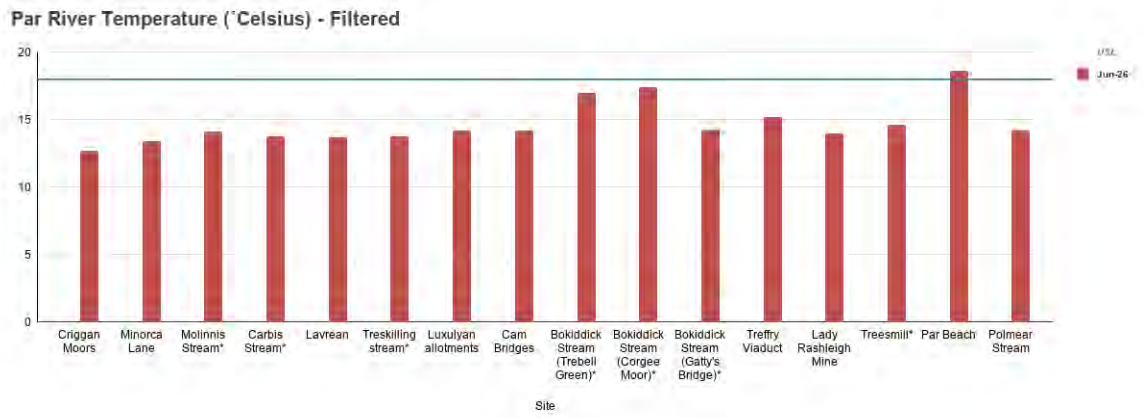
PAR RIVER/TRIBUTARY	LOCATION		Temperature ˚Celsius
Par	Criggan Moors, Par River, SX 01882 61133		**12.7**
Par	South of Minorca Lane, Par River, SX 02657 59788		**13.4**
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271		**14.1**
Tributary	Carbis Stream SX 02834 59401		**13.8**
Par	Lavrean, Par River SX 03134 59164		**13.7**
Tributary	Treskilling, Treskilling Stream, SX 04107 57726		**13.8**
Par	Luxulyan allotments, Par River, SX 04732 58045		**14.2**
Par	Cam Bridges, Par River, SX 05292 57454		**14.2**
Tributary	Trebell Green, Bokiddick Stream SX 0551960226		**17**
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167		**17.4**
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953		**14.3**
Par	Treffry Viaduct, Par River, SX 05650 57179		**15.2**
Par	Lady Rashleigh Mine, Par River, SX 06451 56509		**14**
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385		**14.6**
Par	Par Beach slipway, SX 0776 53261		**18.6**
Tributary	Polmear Stream, Ship Inn, SX 08749 53417		**14.2**

Colour coding:

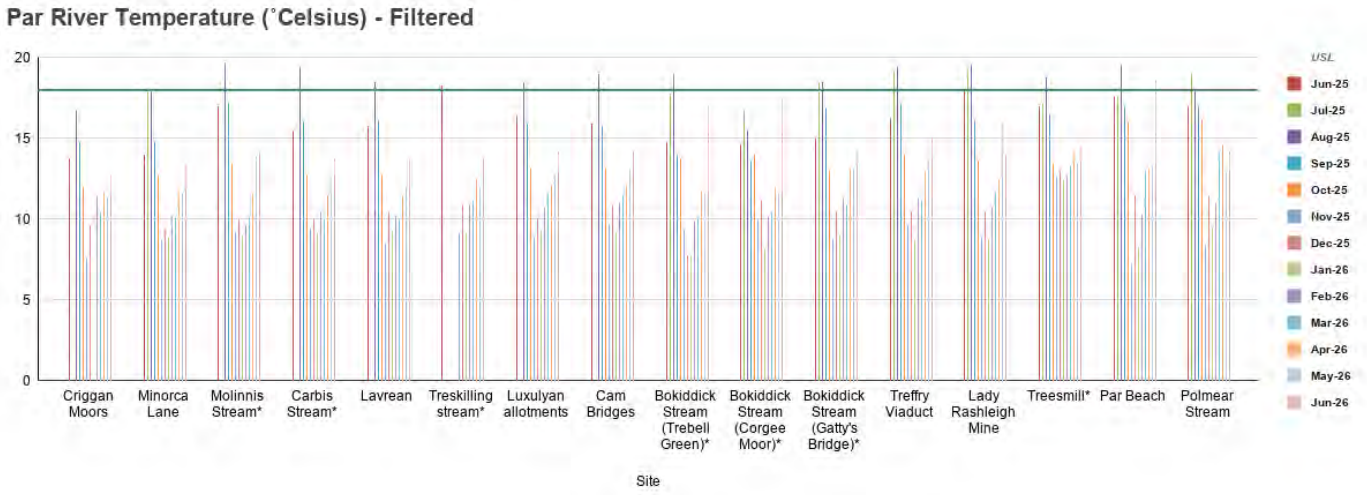
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

3. Graphs

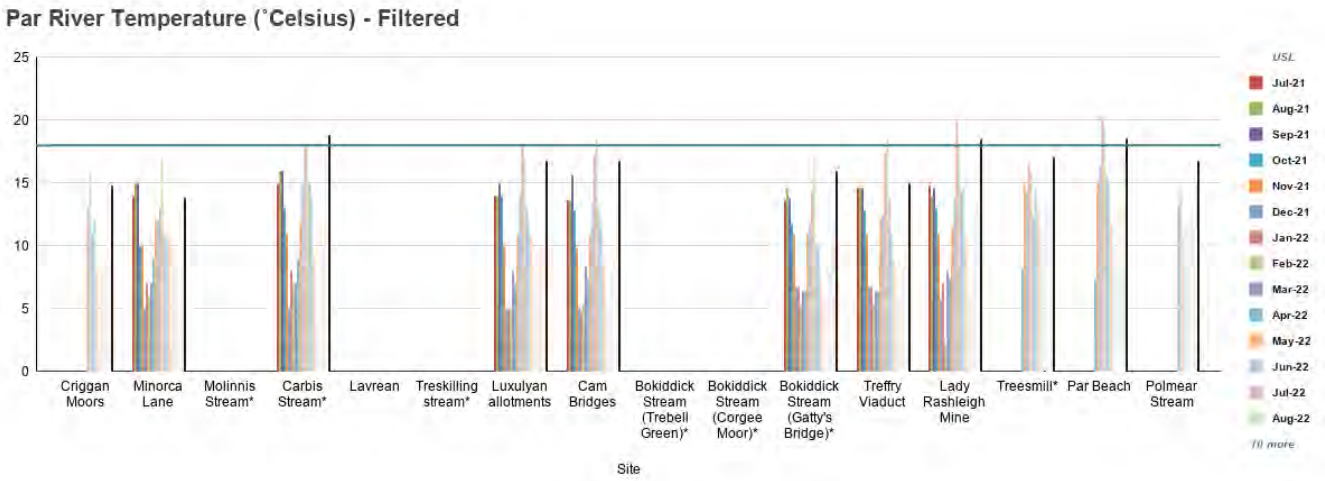
(a) This month:



(b) From 1st June 2025 until 30th June 2026:



(c) From 1st June 2021 until 30th June 2026:

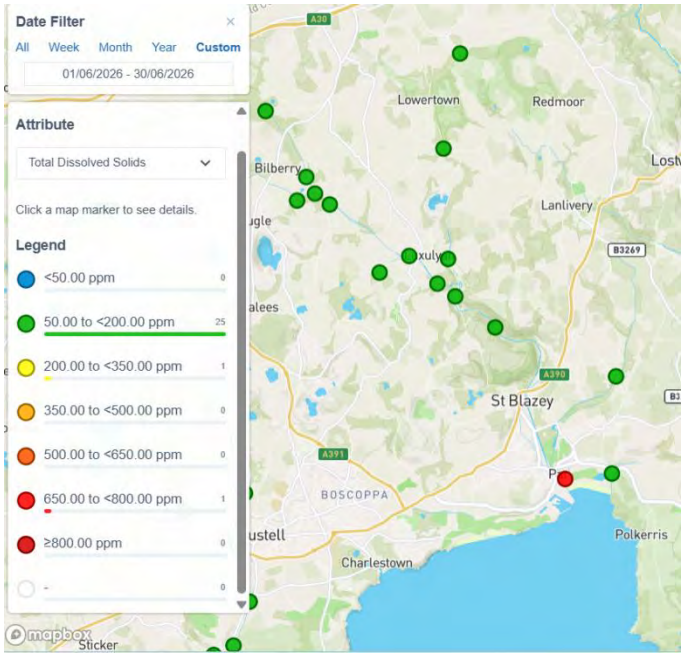


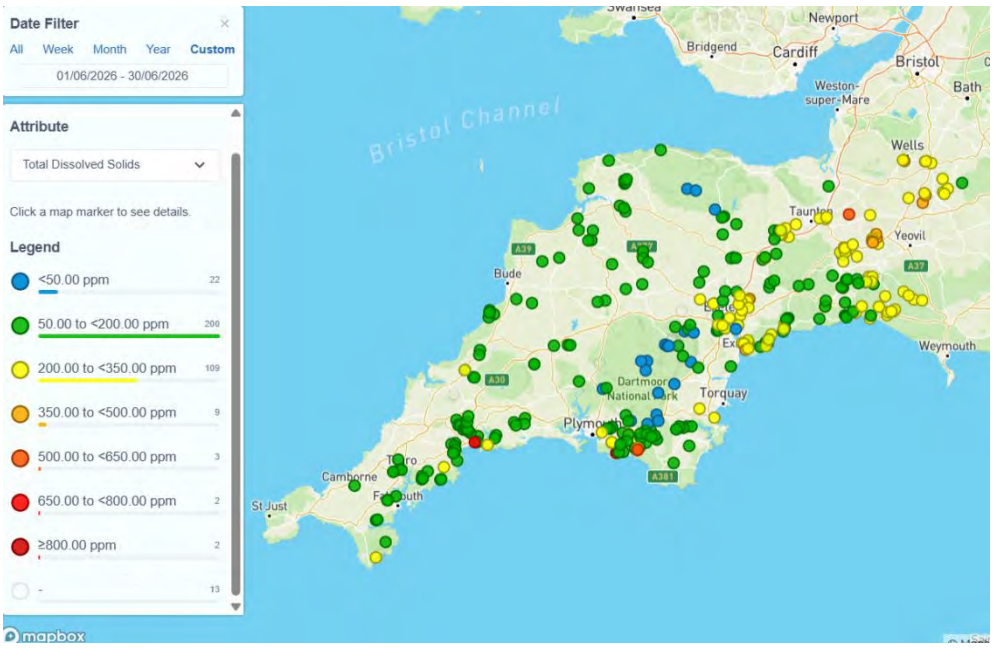
F. TOTAL DISSOLVED SOLIDS

1. We measure these in ppm (parts per million). The Yealm Estuary to Moor Project (YEM) in Devon considers that the upper safe level (USL) for TDS is 300 PPM. This is the WRT's explanation:

Total Dissolved Solids (TDS) is directly related to the conductivity of the water. The more minerals, salts and metals that are dissolved in the water the more conductive it gets. Low levels of dissolved solids in waters such as those on Dartmoor near to the source of the river are a result of very low levels of input from the surrounding landscape. As the river runs down to the sea it collects material from many different inputs, some natural and some man-made such as farms, sewage plants, factories and residential areas. This typically increases the amount of solids dissolved in the water leading to a higher reading. Harmful pollution from things like sewage, slurry and factory discharge will usually elevate your TDS reading. However, some pollutants such as oil can lower conductivity; therefore it should be used as a general indicator of water quality not a specific measure of toxicity. Geology will influence the normal level of conductivity in a watercourse (e.g. Areas dominated by granite generally give a lower conductivity than those with limestone). Regular monitoring will allow the detection of changes in conductivity which can indicate pollution.

2. Geographical comparison. Source: Cartographer.





3. Results June 2026

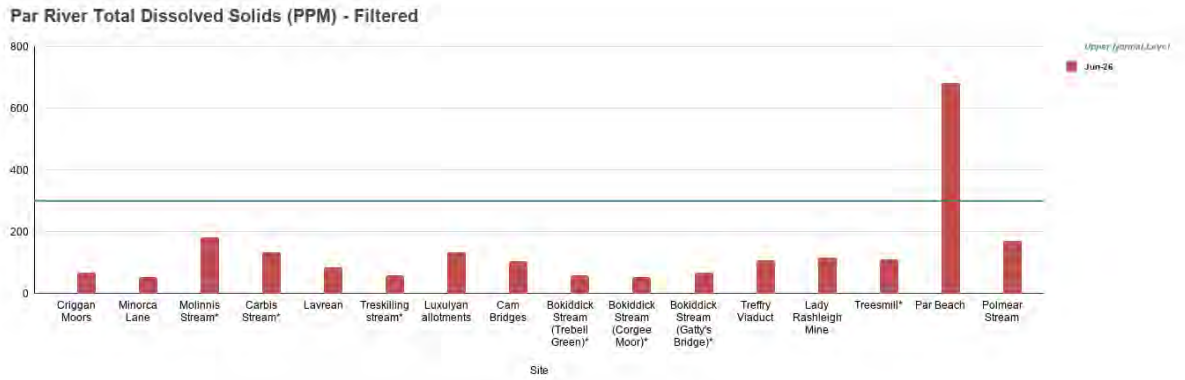
PAR RIVER/TRIBUTARY	LOCATION		Total Dissolved Solids PPM
Par	Criggan Moors, Par River, SX 01882 61133		**67**
Par	South of Minorca Lane, Par River, SX 02657 59788		**53**
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271		**182**
Tributary	Carbis Stream SX 02834 59401		**132**
Par	Lavrean, Par River SX 03134 59164		**84**
Tributary	Treskilling, Treskilling Stream, SX 04107 57726		**58**
Par	Luxulyan allotments, Par River, SX 04732 58045		**132**
Par	Cam Bridges, Par River, SX 05292 57454		**106**
Tributary	Trebell Green, Bokiddick Stream SX 0551960226		**58**
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167		**54**
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953		**68**
Par	Treffry Viaduct, Par River, SX 05650 57179		**107**
Par	Lady Rashleigh Mine, Par River, SX 06451 56509		**117**
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385		**110**
Par	Par Beach slipway, SX 0776 53261		**683**
Tributary	Polmear Stream, Ship Inn, SX 08749 53417		**170**

Colour coding:

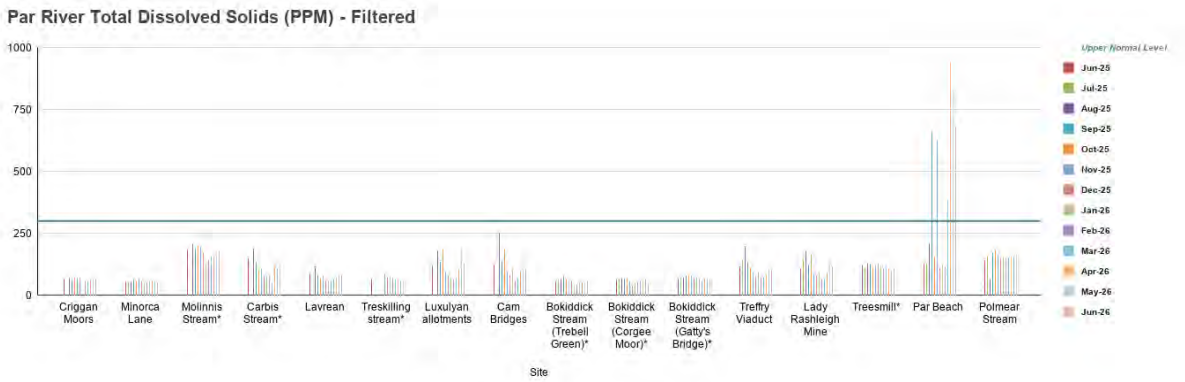
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

3. Graphs

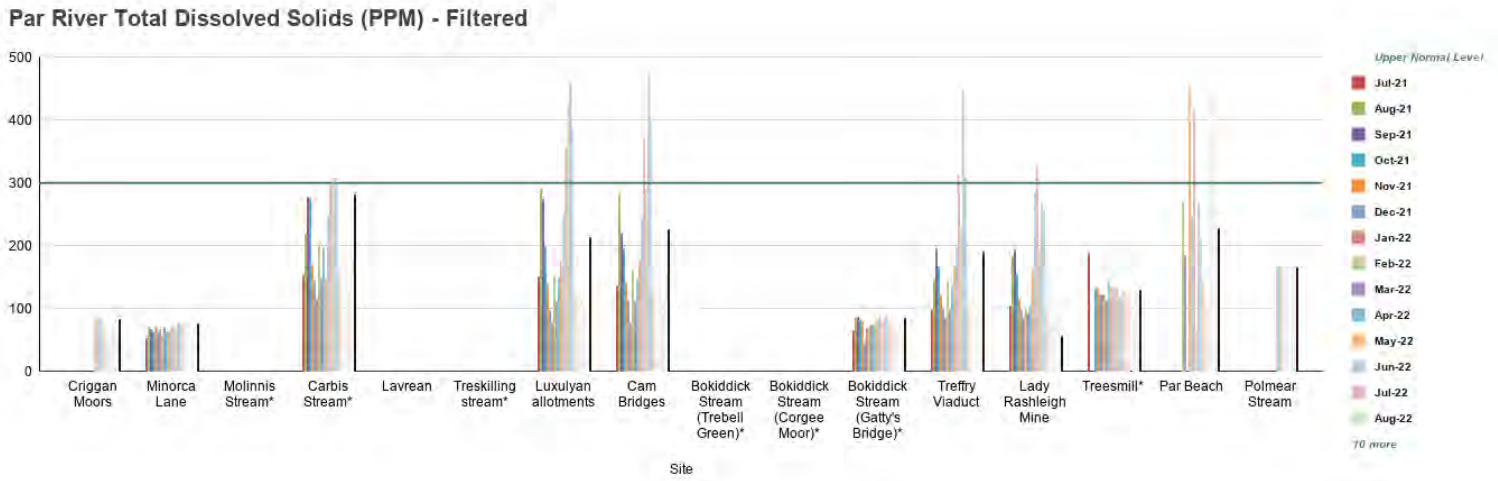
(a) This month:



(b) From 1st June 2025 until 30th June 2026:



(c) From 1st June 2021 until 30th June 2026:



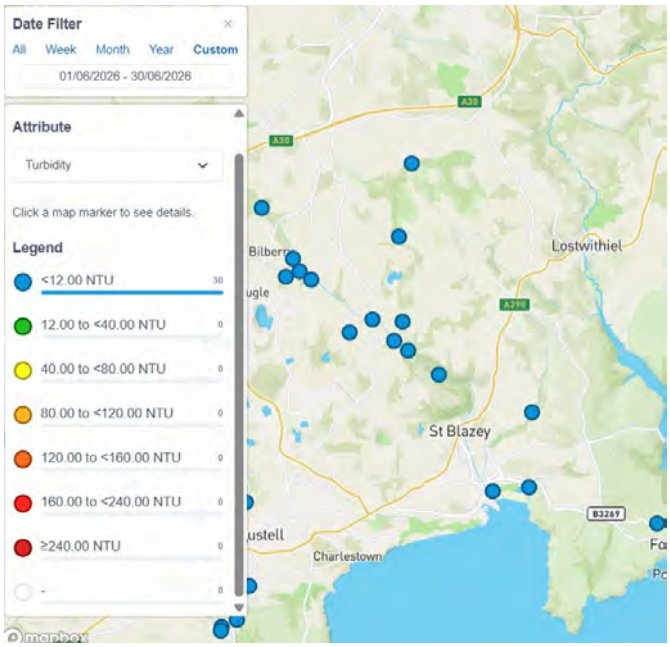
G. TURBIDITY

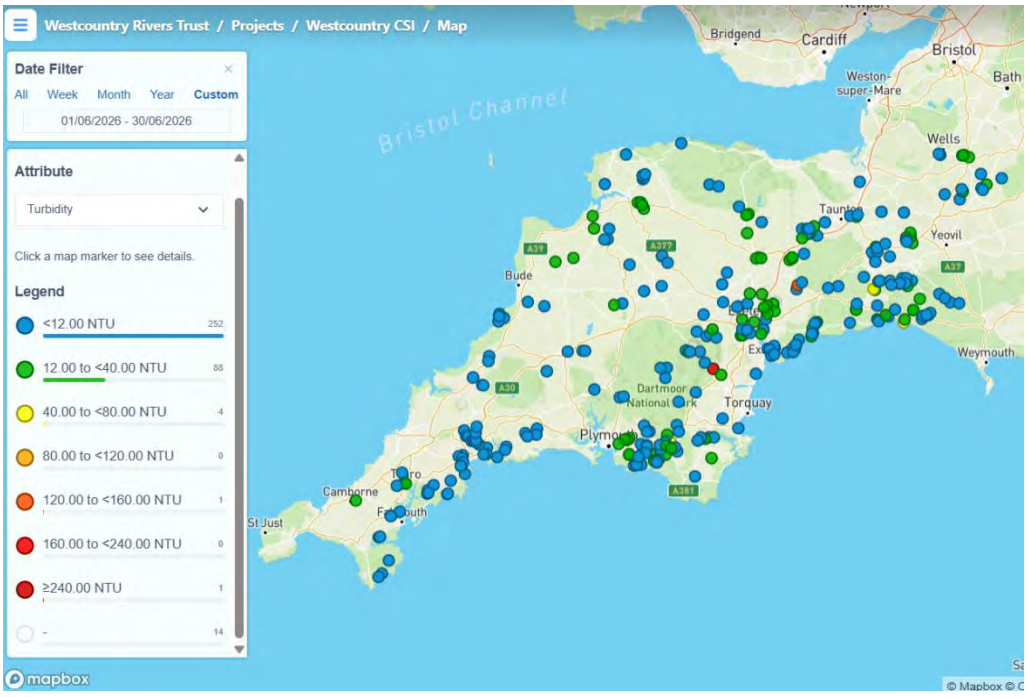
1. This is the WRT explanation of this measure:

Turbidity tube is a measure of the optical clarity of the water. The more suspended particles in the water the lower the clarity and the higher the turbidity. You will often find your waterbody gets more turbid after heavy rainfall due to soil running off the fields and sediment being mixed into the water column. This loss of topsoil is both a problem for farmer and river. It can often contain chemicals from the fertiliser and pesticides used on the land. An increase in sediment level on the substrate of the river can cause smothering of habitat by removing light and oxygen. Aquatic wildlife such as the less mobile invertebrates and fish eggs struggle to survive in low oxygen conditions and without light, plants are unable to grow. It is a good idea to sample your river after different weather conditions to understand how it responds to rainfall or drought.

The Yealm Estuary to Moor Project (YEM) in Devon considers that the upper safe level (USL) for turbidity is 75 NTU = 25 mg/l.

2. Geographical comparison. Source: Cartographer.





3. Results June 2026:

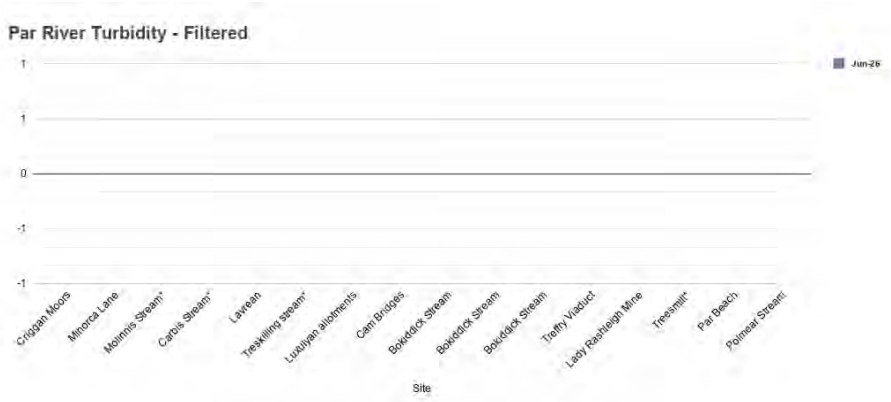
PAR RIVER/TRIBUTARY	LOCATION		Turbidity (NTU)
Par	Criggan Moors, Par River, SX 01882 61133		**<12**
Par	South of Minorca Lane, Par River, SX 02657 59788		**21**
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271		**<12**
Tributary	Carbis Stream SX 02834 59401		**<12**
Par	Lavrean, Par River SX 03134 59164		**<12**
Tributary	Treskilling, Treskilling Stream, SX 04107 57726		**<12**
Par	Luxulyan allotments, Par River, SX 04732 58045		**<12**
Par	Cam Bridges, Par River, SX 05292 57454		**<12**
Tributary	Trebell Green, Bokiddick Stream SX 0551960226		**<12**
Tributary	Corgee Moor, Bokiddick Stream SX 0593462167		**<12**
Tributary	Gatty's Bridge, Bokiddick Stream SX 05531 57953		**<12**
Par	Treffry Viaduct, Par River, SX 05650 57179		**<12**
Par	Lady Rashleigh Mine, Par River, SX 06451 56509		**<12**
Tributary	Treesmill, Tywardreath Stream, SX 08873 55385		**<12**
Par	Par Beach slipway, SX 0776 53261		**<12**
Tributary	Polmear Stream, Ship Inn, SX 08749 53417		**<12**

Colour coding:

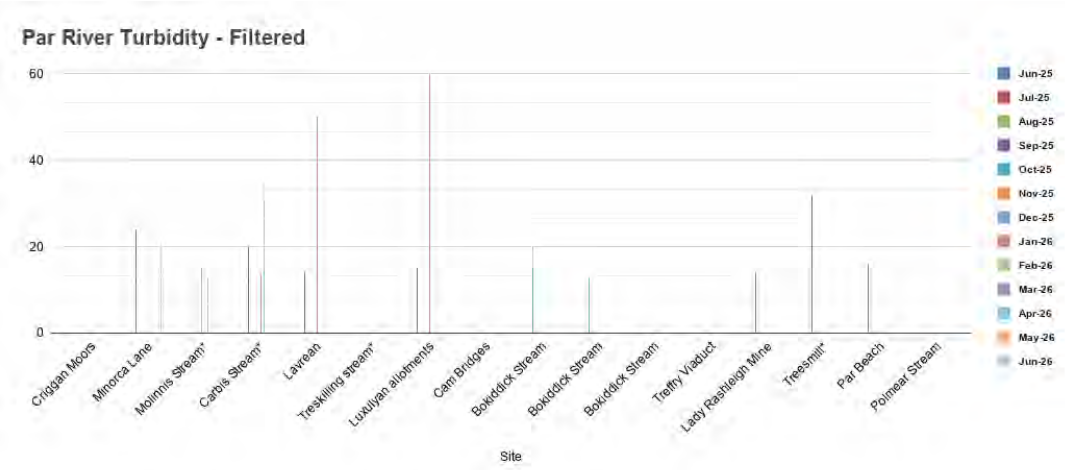
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

4. Graphs

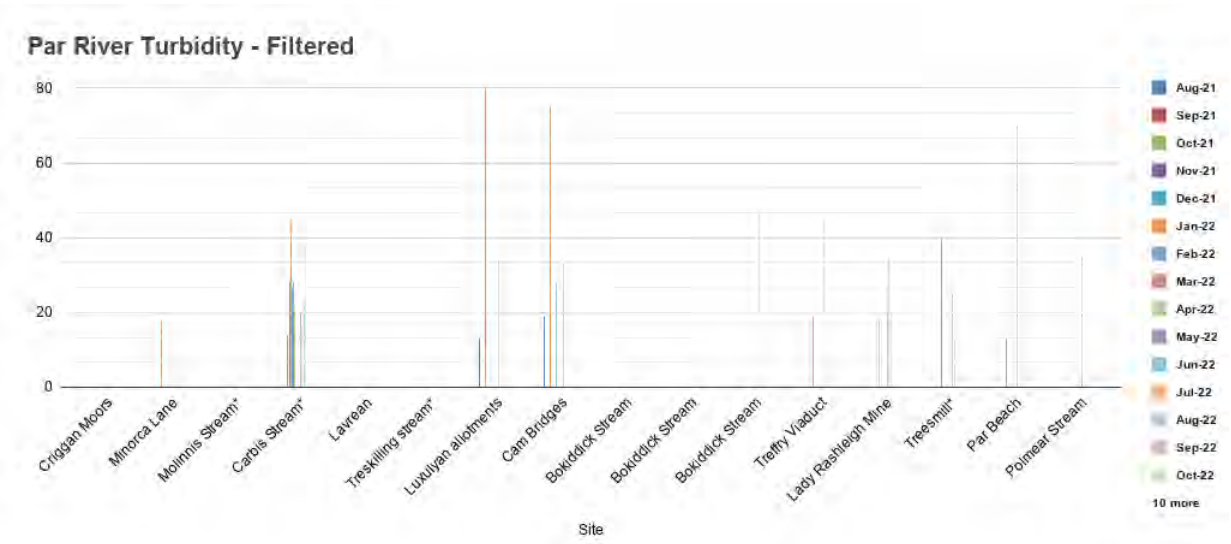
(a) This month:



(b) From 1st June 2025 until 30th June 2026:



(c) From July 2021 until 30th June 2026:



H. PHOSPHATES

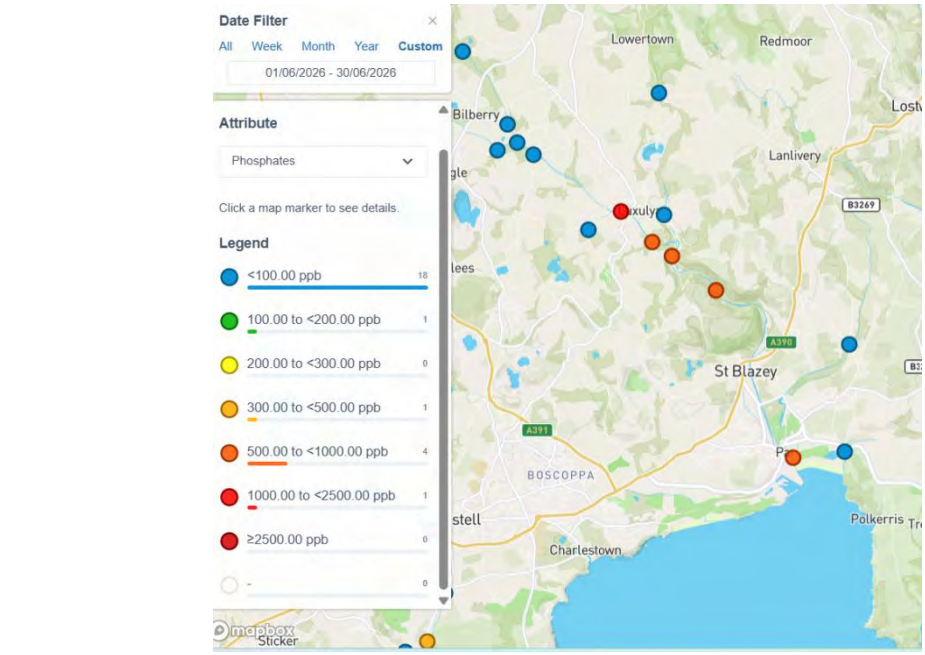
1. This is the WRT's explanation of this measure.

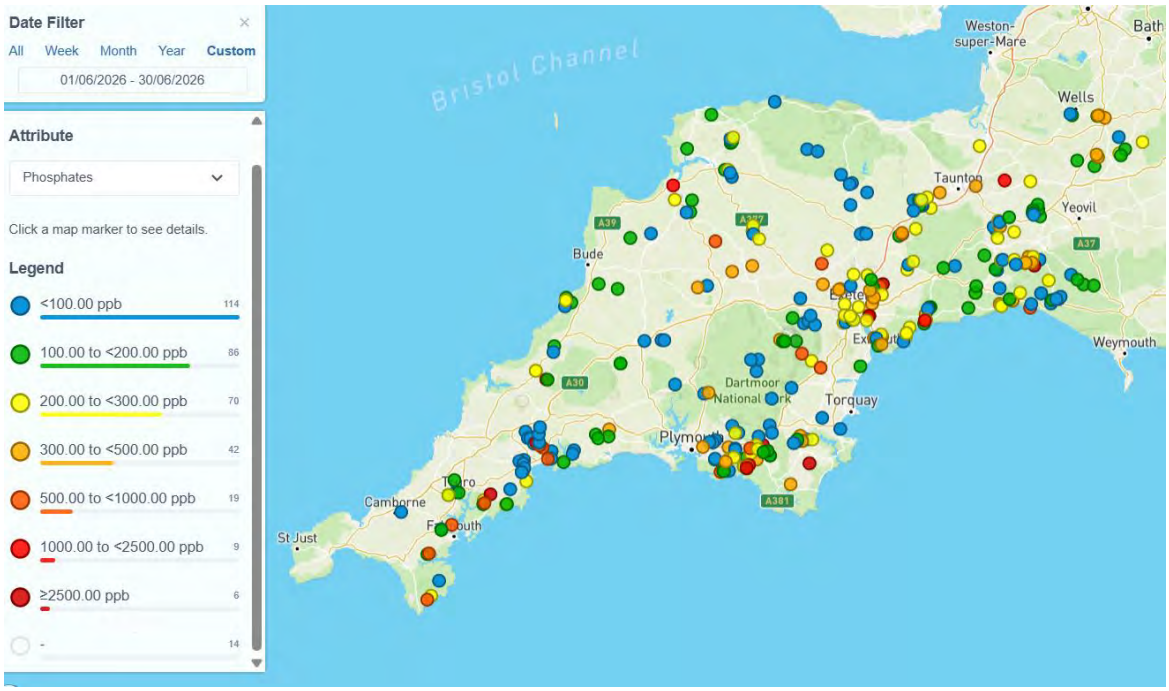
Phosphate occurs naturally within the river ecosystem, but in very low levels under 0.05 mg/l. Therefore, higher levels may indicate anthropogenic input. Phosphate is found in animal and human waste, cleaning chemicals, industrial runoff and fertiliser so this can be a good indicator of pollution. Having raised levels of phosphate can lead to increases in plant growth within the watercourse. This leads to a depletion of oxygen due to the plant's aerobic respiration during the night. Without oxygen aquatic species cannot survive and the river ecosystem collapses. (It is important to note that phosphate is taken up by plants. You may get a low reading but high plant growth, indicating eutrophication.) Ranges on phosphate diagnostic colour chart:

0 – 100 OK

200 – 300 HIGH
500 – 2500 – TOO HIGH

2. Geographical comparison. Source: Cartographer.





3. Results June 2026

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).

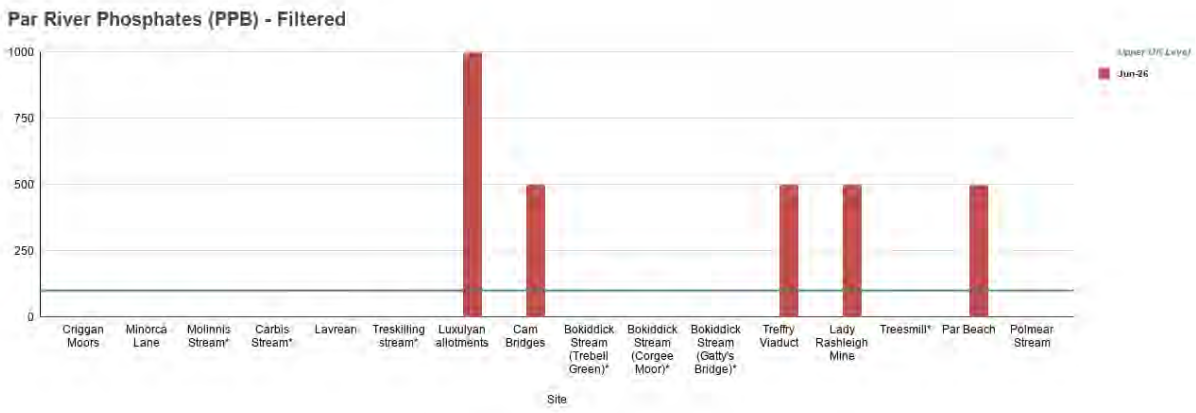
PAR RIVER/TRIBUTARY	LOCATION		Phosphates PPB
Par	Criggan Moors, Par River, SX 01882 61133		0
Par	South of Minorca Lane, Par River, SX 02657 59788		0
Secondary tributary	Near Forkandles Farm, Molinnis Stream, SX 02460 59271		0
Tributary	Carbis Stream SX 02834 59401		0
Par	Lavrean, Par River SX 03134 59164		0
Tributary	Treskilling, Treskilling Stream, SX 04107 57726		0
Par	Luxulyan allotments, Par River, SX 04732 58045		1000
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		500
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

Colour coding:

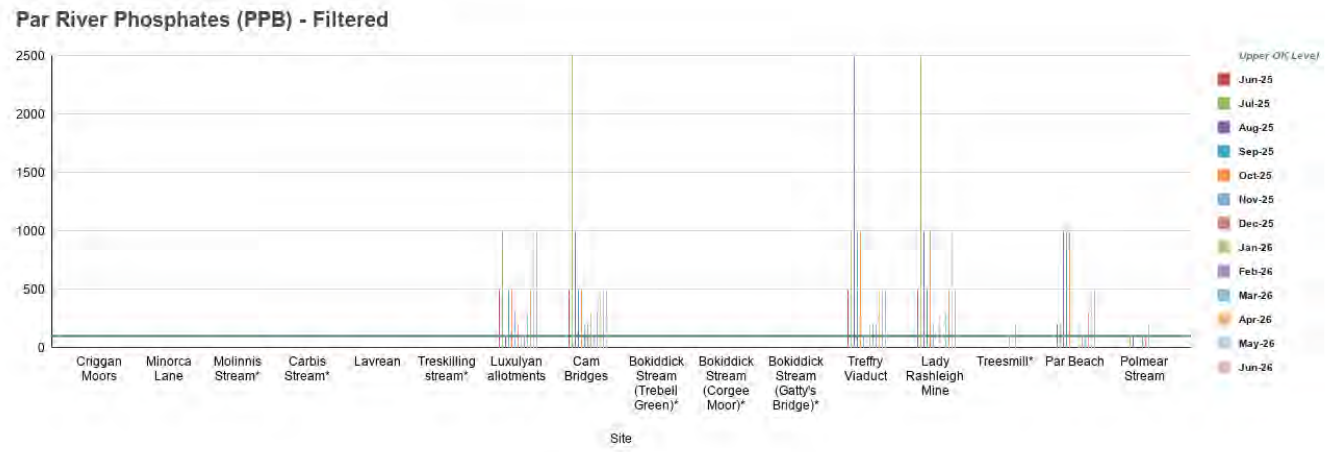
Upper Par	
Lower Par	
Bokiddick Stream	
Tributaries of Upper Par (China Clay-country streams)	
Tributaries of Lower Par	

4. Graphs

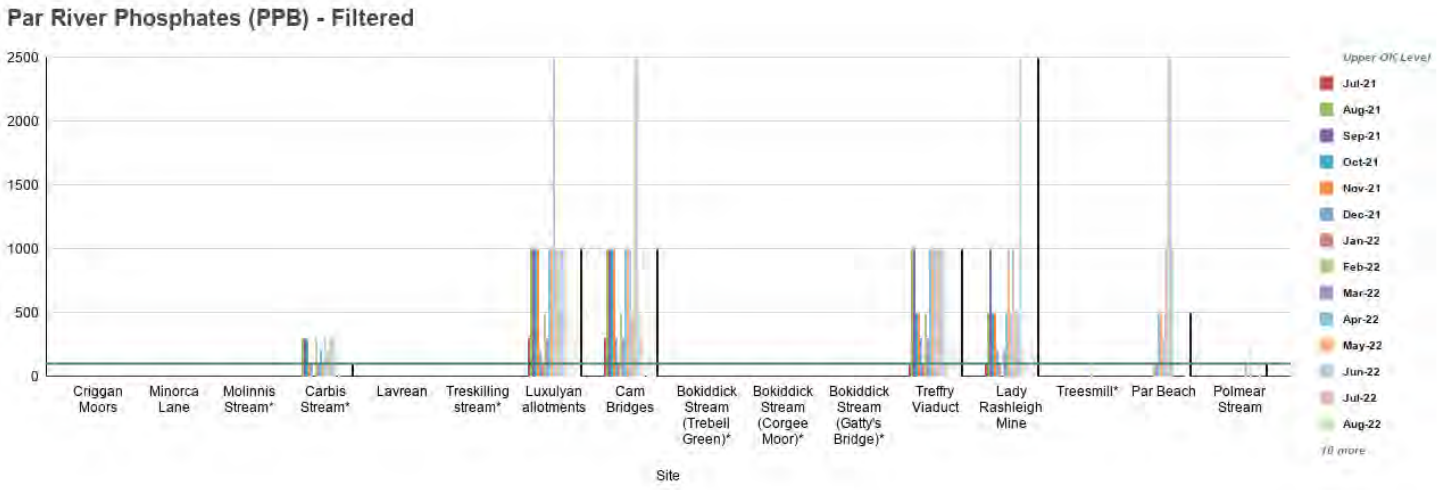
(a) This month:



(b) From 1st June 2025 until 30th June 2026:



(c) From July 2021 until 30th June 2026:

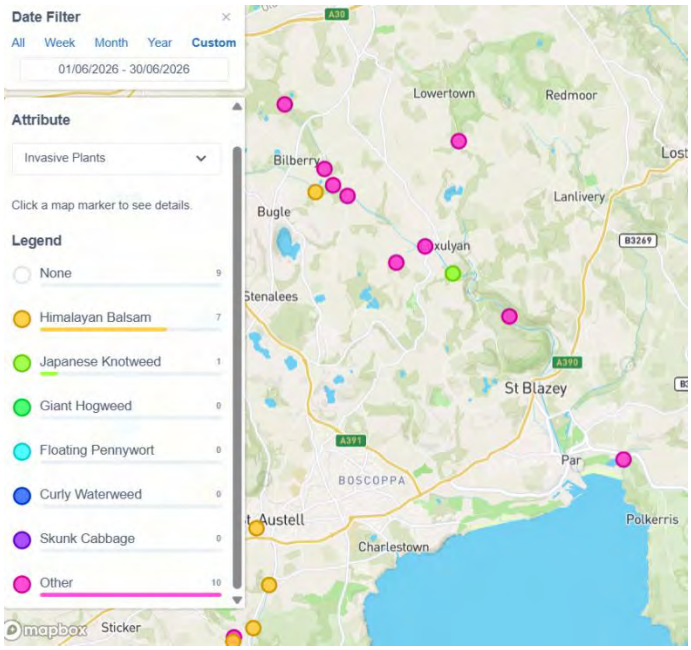


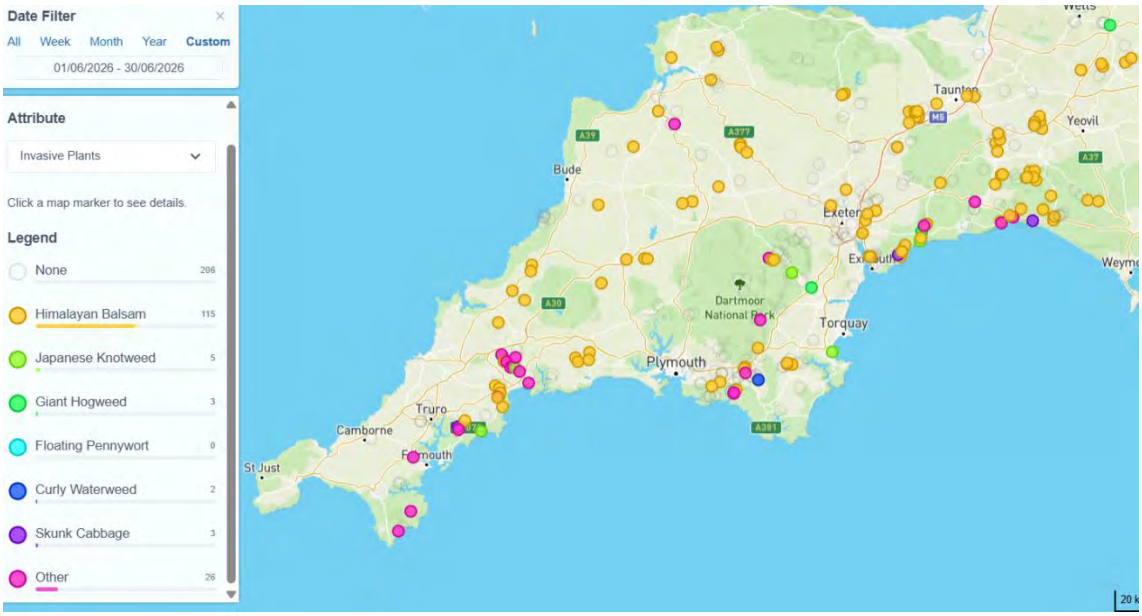
I. NITRATE

Nitrate results were recorded only on the Par River at Par Beach slipway and on the Polmear Stream. Readings were 0 PPM.

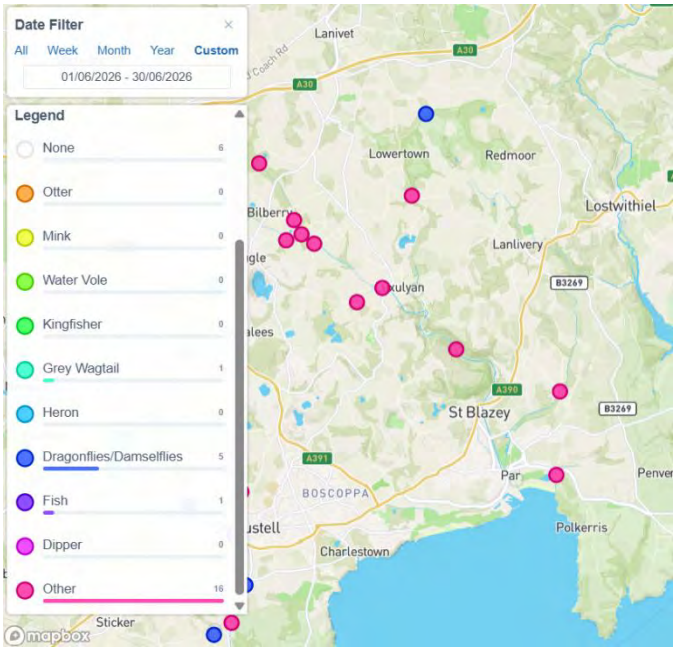
J. WILDLIFE & INVASIVE PLANTS

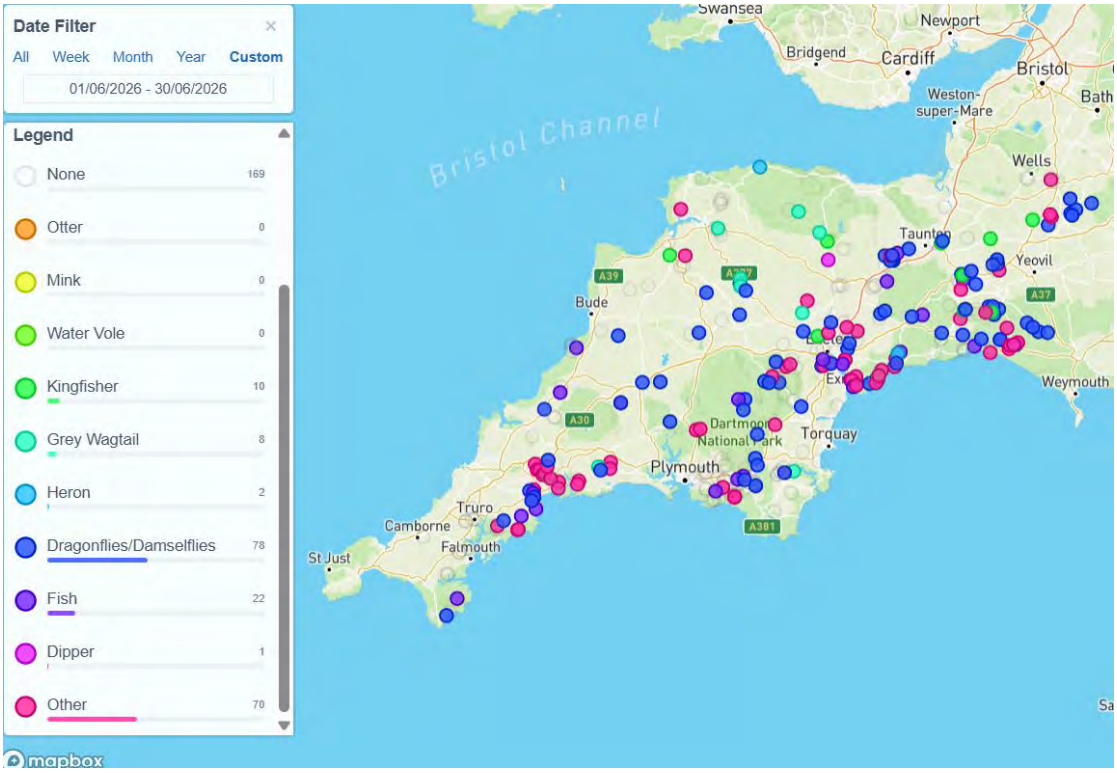
1. Invasive Plants sightings at the monitoring points included:





2. Wildlife spotted:





Wildlife & Invasive Plants sightings at the monitoring points included:

LOCATION	WILDLIFE NOTED		INVASIVE PLANTS NOTED
Criggan Moors, SX 01882 61133	**HEARD: Chiffchaff, Buzzard**		Hemlock Water Dropwort
South of Minorca Lane, Par River, SX 02657 59788	**HEARD: Wren, Magpie, Blue Tit, Blackcap, Chaffinch, Robin**		Hemlock Water Dropwort
Forkandles Farm, Molinnis Stream, SX 02460 59271	**HEARD: Chiffchaff**		Japanese Knotweed, Hemlock Water Dropwort, Himalayan Balsam
Carbis Stream SX 02834 59401	**HEARD: Wren**		Hemlock Water Dropwort
Lavrean, Par River SX 03134 59164	**HEARD: Wren**		Hemlock Water Dropwort
Treskilling, Treskilling Stream, SX 04107 57726	**SEEN: Goldfinches, Swallows** **HEARD: Goldfinch, Great Tit**		
Luxulyan allotments, Par River, SX 04732 58045	**HEARD: Chiffchaff, Blackbird, Coal Tit, Carrion Crow, Blue Tit, Robin, Wren**		Hemlock Water Dropwort
Cam Bridges, Par River, SX 05292 57454			Hemlock Water Dropwort, Japanese Knotweed
Trebell Green, Bokiddick Stream SX 0551960226	**SEEN: Beaver lake, Broad-bodied Chaser, Damselfly, Pond skater** **HEARD: Chiffchaff, Blackbird, Song Thrush, Blue Tit, Great Tit, Blackcap, Linnet, Ringed Plover, Jackdaw**		
Corgee Moor, Bokiddick Stream SX 0593462167	**HEARD: Wren, Blue Tit, Chiffchaff, Chaffinch, Blackbird**		Hemlock Water Dropwort
Gatty's Bridge, Bokiddick Stream SX 05531 57953			
Treffry Viaduct, Par River, SX 05650 57179			Hemlock Water Dropwort
Lady Rashleigh Mine, Par River, SX 06451 56509	**SEEN: Riverfly nymphs (Cased Caddis, Caseless Caddis, Flat-bodied Upwing, Olives, Gammarus).**		Hemlock Water Dropwort
Treesmill, Tywardreath Stream, SX 08873 55385	**HEARD: Blackbird, Chiffchaff, House Sparrow, Chaffinch, House Martin, Dunnock, Long-tailed Tit, Swallow, Goldcrest, Goldfinch** **At Riverfly site downstream: Mayflies, Cased Caddis, Caseless Caddis, Olives, Gammarus. Fish (Trout, Roach, Dace, Chubb?)**		Hemlock Water Dropwort
Par Beach slipway, SX 0776 53261			
Polmear Stream, Ship Inn, SX 08749 53417	**Pied Wagtail, Blackbird**		Hemlock Water Dropwort

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

Colour coding:

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

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

1. Four of the group (Joan Farmer, Veronica Jones, Roger Smith, and Simon Tagney) have undertaken the training to carry out Riverfly Surveys under the Anglers' Riverfly Monitoring Initiative (https://www.riverflies.org/rp-riverfly-monitoring-initiative). In short, sampling for 8 riverfly groups is carried out using standardised methods with scores calculated for their abundance. Information is passed to ARMI and the ORKS database. If the score does not reach a trigger level (in our case trigger level was raised from 5 to 6 in May 2022), the Environment Agency must be informed immediately since it is highly likely to indicate that the water is polluted. Our group initially received approval to sample at two sites: Luxulyan allotments (SX 04743 58054) and Lady Rashleigh Mine (SX 06453 56500). We have decided, for the time being, to concentrate on the latter, but from May 2024 moved the kick-sampling site a few metres downstream of the bridge where conditions are safer and easier. This amended site is known as Lady Rashleigh 2 in the ARMI/ORKS record. Recently, Simon and Brian have started to look at a location on the Tywardreath Stream, at SX SX0887055340.

It is impossible to count every invertebrate so this counting method is used:

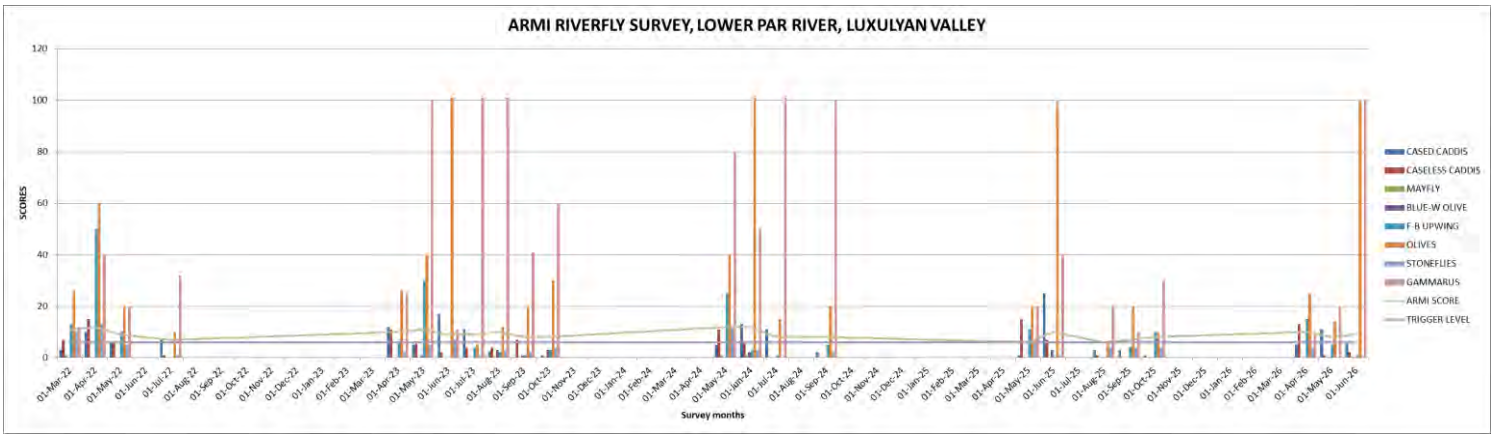
Abundance	Score	Estimated Number
1-9	1	Quick count
10-99	2	Nearest 10
100-999	3	Nearest 100
>1000	4	Nearest 1000

2. Lower Par River

Results of survey on the Par River carried out by Joan Farmer, Veronica Jones, Deanna Earl and Roger Smith on 10th June 2026.

	SPECIES	NUMBER	CATEGORY
Trichoptera			
1	Cased Caddisfly	6	1
2	Caseless Caddisfly	2	1
Ephemeroptera 3 tails			
3	Mayfly (Ephemeridae)	0	0
4	Blue-winged olive (Ephemerellidae)	0	0
5	Flat-bodied up-wings (Heptageniidae)	1	1
6	Olives (Baetidae)	100	3
Plecoptera 2 tails			
7	Stoneflies	0	0
Gammaridae			
8	Freshwater Shrimp	100	3
			9

CATEGORY TOTAL	**9**
TRIGGER LEVEL	**6**



3. Tywardreath Stream

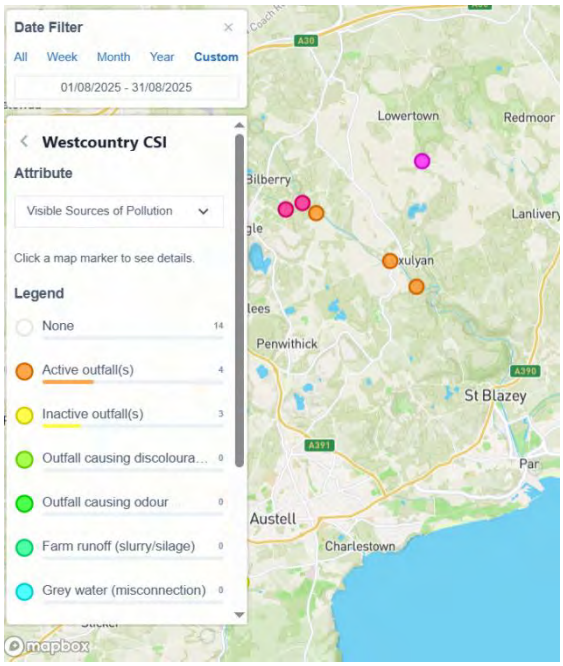
Results of survey carried on 15th June 2026 by Simon Tagney and Cathy Trodd:

	SPECIES	NUMBER	CATEGORY
Trichoptera			
1	**Cased Caddisfly**	**4**	**1**
2	**Caseless Caddisfly**	**2**	**1**
Ephemeroptera 3 tails			
3	**Mayfly (Ephemeridae)**	**5**	**1**
4	**Blue-winged olive (Ephemerellidae)**	**0**	**0**
5	**Flat-bodied up-wings (Heptageniidae)**	**0**	**0**
6	**Olives (Baetidae)**	**12**	**2**
Plecoptera 2 tails			
7	**Stoneflies**	**0**	**0**
Gammaridae			
8	**Freshwater Shrimp**	**100+**	**3**
			8

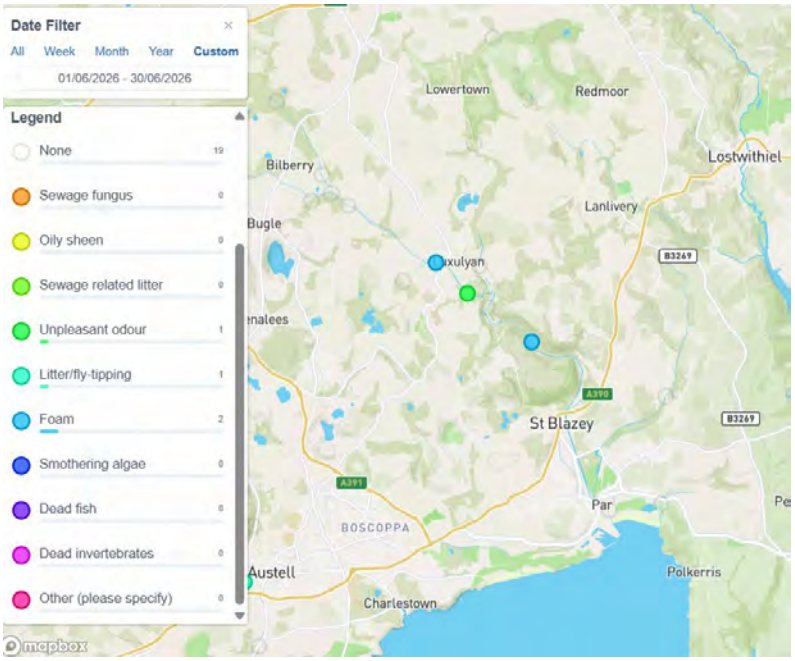
CATEGORY TOTAL	**8**
TRIGGER LEVEL	**6**

L. POLLUTION SOURCES AND EVIDENCE

1. Visible sources of pollution (source: Cartographer)



2. Evidence of recent pollution



LOCATION		EVIDENCE OF RECENT POLLUTION
Criggan Moors, SX 01882 61133		
South of Minorca Lane, Par River, SX 02657 59788		
Forkandles Farm, Molinnis Stream, SX 02460 59271		
Carbis Stream SX 02834 59401		
Lavrean, Par River SX 03134 59164		
Treskilling, Treskilling Stream, SX 04107 57726		
Luxulyan allotments, Par River, SX 04732 58045		Filtered sewage (?), foam, phosphates
Cam Bridges, Par River, SX 05292 57454		Foam, smell, filtered sewage (?), phosphates
Trebell Green, Bokiddick Stream SX 0551960226		
Corgee Moor, Bokiddick Stream SX 0593462167		
Gatty's Bridge, Bokiddick Stream SX 05531 57953		
Treffry Viaduct, Par River, SX 05650 57179		Filtered sewage (?)phosphates
Lady Rashleigh Mine, Par River, SX 06451 56509		Phosphates, foam, filtered sewage (?)
Treesmill, Tywardreath Stream, SX 08873 55385		
Par Beach slipway, SX 0776 53261		Filtered sewage (?), phosphates
Polmear Stream, Ship Inn, SX 08749 53417		

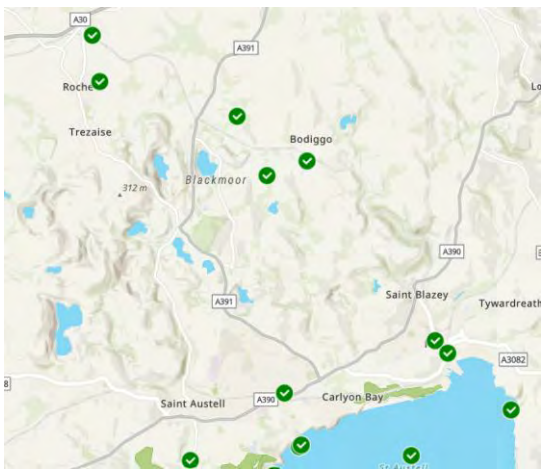
N.B. Although not noticeable at our monitoring points, there is a persistent smell of sewage in the vicinity of the Molinnis CSO even when there have been no reported discharges.

Colour coding:

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

3. South West Water Storm Overflows

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



This screenshot is for illustrative purposes only. Not all of the locations are in the Par River catchment.

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

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

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

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

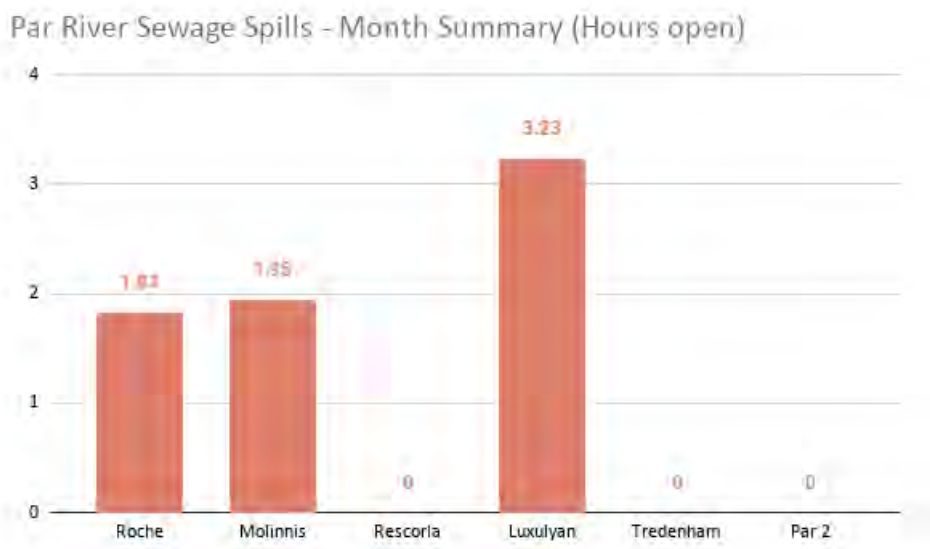
This information has been taken from the *Surfers Against Sewage* discharge website: https://datahq.sas.org.uk/sewage-data-hq/ and The Rivers Trust's site: https://theriverstrust.org/sewage-map .

(c) Graphs:

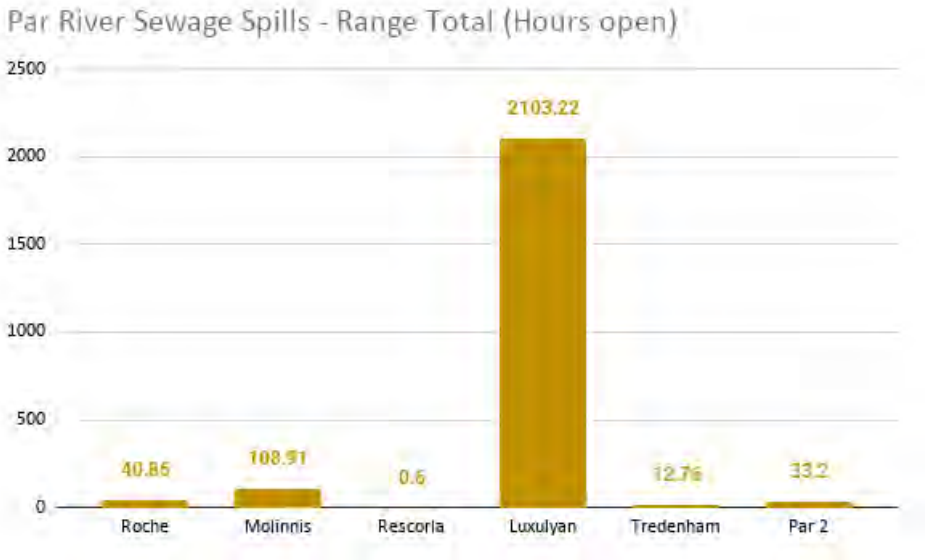
Data has been taken from https://datahq.sas.org.uk/sewage-data-hq/.

Any errors are the fault of the compiler of this report. Results are indicative, not definitive.

(i) June 2026:



(ii) **From 1st December 2025 until 30th June 2026:**



M. HOW TO REPORT RIVER POLLUTION

HOW TO REPORT RIVER POLLUTION

River pollution can now be reported **online** to the Environment Agency at: https://www.gov.uk/report-water-pollution .

Use this service to report water pollution in:

- rivers or the sea
- lakes or reservoirs
- canals
- smaller streams or watercourses (for example, a brook or culvert)

Water pollution can include:

- sewage
- waste, spills or leaks from farms
- waste, spills or leaks from factories or other industry
- spills or leaks from objects

If you're unable to use the online service, you can **call** the Environment Agency:
Environment Agency incident hotline

Telephone: **0800 80 70 60**

24-hour service

Readers of this report wishing to submit questions or comments to South West Water can send them to eirenquiries@pennon-group.co.uk .

N. OUR GROUP AND SUPPORTERS

Monitoring is part of the Citizen Science programme run by the West Country Rivers Trust (WCRT) and is carried out monthly by volunteers, including Joan Farmer; Veronica Jones; Roger Smith; Simon Tagney; Maggie Tagney; and Brian Harrisson. They have received training from Lydia Ashworth, Junior Evidence and Engagement Officer of the West Country Rivers Trust (https://wrt.org.uk/project/become-a-citizen-scientist/). Results are logged on the Cartographer website. The support and advice given by Ross Tonkin, Lloyd Paynter, David Edwards, Claire and Gary Phillips, Jenny Heskett, Nick Taylor, Jeremy Roberts, Mat Bateman, Colin Pringle, Matt Healey, Simon Browning, Lydia Deacon, Jack Middleton, Anna Seal, Anna Crane, Zoe Connelly, Jade Neville, Lauren Jasper, Callum Lewis, Gwen Maggs, Oscar Miller, Sasha Pinto, Arthur Andrews, Jenny Tagney and Deanna Earl is greatly appreciated. The work carried out by the late Dave Burrell both in the field and in checking reports will not be forgotten. The interest and encouragement offered by Environment Agency officers, especially Lisa Best, Lisa Goodall, Layla Ousley, Jenny Davies, Leah Steward, Nicola Rogers, Peter Scobie, and Sally Turberville have been invaluable.

Report compiled by Roger Smith, 25th July 2026