"Water Quality Measurement Network" (WQMN) recordings on the Warwickshire Avon at Jubilee Bridge Fladbury

	v	VQMN Rec	WQMN Observations								WQMN M	easurements		GirlingAS Notes		
Sample Date	Operator / Rep	resenting	Location	Time	River Level	Flow	Weather	Rain in last 24hrs	Algal Bloom	Signs of Pollution	Additional Notes for WQMN	Water Temp.	Electrical Conductivity (u5/cm) micro Siemens per cestimeter	Phosphate (mg/t) mill-grams per itse	Nitrate (ppm) parts per million	Phosphate peaked in July 2022 to 13.4 times the norm of 0.1mg/l regularly measured by the Environmental Agency at Jubilee Bridge
	Key 7 Greater than the recommended level Satisfactory													Metrics Explained ideal is 0.03/0.05mg/t. Gov. g'lines max. 0.1mg/t EA typical value at Fladbury is 0.1mg/t	oi0 ppm is safe for fish to thrive	
Nov. 2021	Glyn Marshall		Jubilee Br. Wark's Avon											0.86		Phosphate data supplied by Glyn Marshall pre WQMN / No fish caught in Matches during November 2021
Dec. 2021	Glyn Marshall		Jubilee Br. Wark's Avon											0.91		Phosphate data supplied by Glyn Marshall pre WQMN / No fish caught in Matches during November / December 2021
22/05/2022	Andy/Dave/Frank	GirlingAS 1	Jubilee Br. Wark's Avon	10.30am	Low	Normal	Cool / Dry	No	No	Foam in weir pool	Low River	19.4	978	0.91	20 /	First GirlingAS WQMN measurement confirming earlier Phosphate results
04/06/2022	Andy Hammerton	GirlingAS 2	Jubilee Br. Wark's Avon	10.08am	Low	Below av.	Cloudy	No	No	No fish topping	No fry visible	16.6	1080	0.87	20/	Second GirlingAS WQMN measurement confirming earlier GirlingAS data set
26/6/2022	Andy Hammerton	GirlingAS 3	Jubilee Br. Wark's Avon	12.02am	Low	Below av.	Overcast	Yes	No	Foam in weir pool	Water Clear	19.7	1030	1.06	/10	The fishing Season has begun & in the first two matches in June 2022 Barbel, Chub, Roach and Dace were caught despite the highest Phosphate level recorded so far.
9/7/2022	Andy Hammerton	GirlingAS 4	Jubilee Br. Wark's Avon		Low	Below av.	Sunny	No	No	Foam in weir pool	Water Clear	19.8	1060	1.02	20	Water Quality appears to be stable and consistantly poor over the last 9 month period
16/7/2022	Glyn Marshall	Angling Trust	Jubilee Br. Wark's Avon	4.15pm	Low	Below av.	Hot	No	No	Green Tinge	Water very Low and Clear	24	1060	1.34	10	Glyn Marshall representing the Angling Trust obtained similar results to previous GirlingAS results although meassured the highest Phosphate level so far.
23/7/2022	Andy Hammerton Glyn Marshall	GirlingAS 5 Angling Trust	Simultanous sampling at Jubilee Br. Wark's Avon	10.08	Low	Below av.	Dull and Overcast	No	No	Green Tinge	Water very Low and Clear	21.5 21.8	1100 1100	1.06 1.06	20 20	Simultaneous sampling has approved the GirlingAS process and as a result when making reference to these results you can be assured of their accuracy, Following confirmation, the Angling Trust plan to complete a full Laboratory Test at Fladbury. The river at the moment is alarmingly flow and with the hot spell of
12/8/2022	Stuart Hill	Severn Trent	Above & below Wood Norton Hall		Low	Below av.		No	No		Very Low & dear			1.18 / 1.18		Severn Trent measured above and below Wood Norton Hall for Phosphate (0.18mg/l) and Ammonia (>0.5mg/l) and found similar results, the influx was clear and approx. 3 ltr/sec.
20/8/2022	Andy Hammerton	GirlingAS 6	Jubilee Br. Wark's Avon	4.45pm	Low	Below av.	warm	No	No	No	Very Low & dear	22.2	955	1.00	10	Phosphate remains high but reduced by 25% compared to the July peak. Electrical Conductivity back below the threshold.
7/10/2022	Andy Hammerton	GirlingAS 7	Jubilee Br. Wark's Avon	5-43pm	Low	Below av.	Overcast	Yes	No	No	Very Low & dear	14.8	1030	0.90	20	Phosphate and Electrical Conductivity remain high
23/10/2022	Andy Hammerton	GirlingAS 8	Jubilee Br. Wark's Avon	5-23pm	High/ rising	Above av.	Overcast	Yes	No	No	Rising River	15.4	873	0.70	10	Measurements reflect the rising river & influx of rainwater
3/12/2022	Andy Hammerton	GirlingAS 9	Jubilee Br. Wark's Avon	3pm	High	Above av.		No	No	No	Falling River	8	928	0.51	5	Falling pacey river, Phopsphate and Nitrate clearly improved following a flush through. Very poor match returns similar to November 2021
19/1/2023	Andy Hammerton	GirlingAS 10	Jubilee Br. Wark's Avon	2.33pm	High	Above av.		Yes	No	Water weed Black	Falling River	4.7	803	0.45	10	Falling mucky river, Phopsphate reading lowest for over a year following a flush through.
18/3/2023	Andy Hammerton	GirlingAS 11	Jubilee Br. Wark's Avon	4.22pm	High	Fast	overcast	Yes	No	Water weed Black	Foam	11.2	770	0.21	0	Rising & coloured river, Phosphate lowest reading for 16 months (sample repeated)
10/4/2023	Andy Hammerton	GirlingAS 12	Jubilee Br. Wark's Avon	11.43am	High	Fast	overcast	Yes	No	Water weed Black		13.1	872	0.43	0	Rising & Pacey river, Phosphate >prev. reading.
16/5/2023	Andy Hammerton	GirlingAS 13	Jubilee Br. Wark's Avon	18.42am	Normal	Above ave.	Sunny	No	No	Water weed Black		15.4	862	0.63	0	River returned to normal level, Phosphate >prev. reading.
13/6/2023	Andy Hammerton	GirlingAS 14	Jubilee Br. Wark's Avon	20.20pm	Normal	Average	Sunny	Yes	No	Water weed Black		22.3	964	0.93	1	River fining down after slight rise, Phosphate >prev. reading.
7/7/2023	Andy Hammerton	GirlingAS 15	Jubilee Br. Wark's Avon	19.15pm	Normal	Above ave.	Sunny	Yes	No	Water weed Black		19.5	1040	0.97	1	Similar to last months result
13/8/2023	Andy Hammerton	GirlingAS 16	Jubilee Br. Wark's Avon	08.39am	Low	Normal	Rain	Yes	No	Water weed Black		18.3	925	0.93	2	Similar to last months result
25/9/2023	Andy Hammerton	GirlingAS 17	Jubilee Br. Wark's Avon	12.32	Low	Normal	overcast	No	No	Water weed Black		16.8	804	0.83	20	Cooler conditions
28/10/2023	Andy Hammerton	GirlingAS 18	Jubilee Br. Wark's Avon	14.35	Normal	Normal	overcast	Yes	No	Water weed Black		13.1	832	0.61	10	Back down after a flood
5/11/2023	Andy Hammerton	GirlingAS 19	Jubilee Br. Wark's Avon	14.05	High	Above ave.	overcast	Yes	No	Water weed Black		13.4	634	0.50	5	River Level very High
3/12/2023	Andy Hammerton	GirlingAS 20	Jubilee Br. Wark's Avon	14.23	High	Above ave.	overcast	Yes	No	Water weed Black		6.7	970	0.45	5	River Level very High
14/1/2024	Andy Hammerton	GirlingAS 21	Jubilee Br. Wark's Avon	15.01	High	Above ave.	overcast	Yes	No	Water weed Black		6.5	910	0.50	10	River Level very High, Very Cold Weather
4/2/2024	Andy Hammerton	GirlingAS 22	Jubilee Br. Wark's Avon	14.16pm	average	Above ave.	overcast	No	No	Water weed Black		10.3	974	0.50	20	River Level down. Less pace
6/4/24	Andy Hammerton	GirlingAS 23	Jubilee Br. Wark's Avon	7.18pm	high	Above ave.	Sunny	yes	No	Water weed Black		13.3	532	0.49	5	River level dropping but pacy
31/5/24	Andy Hammerton	GirlingAS 24	Jubilee Br. Wark's Avon	8.22pm	normal	Above ave.	cloudy	no	No	Water weed Black		16.2	881	0.66	10	Normal level but pacey
7/7/2024	Andy Hammerton	GirlingAS 25	Jubilee Br. Wark's Avon	8.55am	normal	Above ave.	cloudy	no	No	Water weed Black		17.2	1020	0.87	10	River dropping after slight rise
5/8/2024	Andy Hammerton	GirlingAS 26	Jubilee Br. Wark's Avon	9.57am	Low	Normal	cloudy	no	No	Water weed Black		20.4	1080	0.91	5	Normal Level
1/9/2024	Andy Hammerton	GirlingAS 27	Jubilee Br. Wark's Avon	12.32pm	Low	Normal	cloudy	no	No	Water weed Black		19.1	1060	0.78	10	River Low & Clear
5/10/24	Andy Hammerton	GirlingAS 28	Jubilee Br. Wark's Avon	14.19pm	High	Above Av.	cloudy	Yes	No	Lots of Foam Weed Black		13.8	595	0.77	2	River falling but fast current with lots of foam
14/12/24	Andy Hammerton	GirlingAS 29	Jubilee Br. Wark's Avon	9.35am	High	Above Av.	cloudy	Yes	No	Lots of Foam Weed Black		7.4	802	0.34	?	River falling but fast current with lots of foam
2/2/25	Andy Hammerton	GirlingAS 30	Jubilee Br. Wark's Avon	9.17am	High	Above Av.	sunny	Yes	No	Lots of Foam Weed Black		6.1	814	0.22	2	River falling but fast current with lots of foam
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Analysis / Conclusions / News;-

Phosphate Unacceptably high disco October 2021 peaking at 1.34 mg/l. hybrid Environmental Agency pre pollution recordings averaging 0.1 mg/l at Jubilee Bridge, the trend remaining dammingh high.

<u>Bleettrial Cond.</u>

Measurements are generally slightly below or higher than the conductivity threshold 1-2000 of conj including the continous presence of dissolved solids, the metric appears very constitute.

Militate

All measurements taken too for how beer said high below the threshold of 2-pay, feat for fin his to three.

1) There were no fish caught in matches during the period of November/ December 2021 and again November/ December 2021, in each case the fish returned for the start of the season in June. Strangely, during these periods there appears to be no significant change in any of the metric.

2) Clourly have been been one improvement in vacior quality gives measurements began in November 2021.

(2) Clourly have been been one improvement in vacior quality gives measurements began in November 2021.

(3) Clourly support to the period of November 2021 and again to the season in June 2021.

(3) Confirmation by the Analysis Two of the fining Sprocess prose that the water quality a fative quietrem as Strated one on Nove.

(3) Severa Trent have concluded that the problem is "a continuent time", then is power water quality as far quietrem as Strated dopon Nove.

(4) After completion of the treatment plant of the treatment p

Conclusions

News The Angling Trust have confirmed the Society's process by obtaining similar results and completed a full laboratory test on the water quality at Fladbury which raised no further concerns

E.Coli

Enal from Gyn Marshal 24/11/22 ther consulting with an Environmental Scientist at the Rivers Trust
"In regards to your Ecol count (138/M/100ml) that it a good and safe level and what I would expect to find in a normal healthy river, you will never get a zero count in natural rivers for Ecol Because you have inputs from avian and mammalian wildlife and I would say a typical level for badgepout bacteria is anywhere between 150-500 MPR(clul) 100 ml if you start to record levels above 50 the level and task to be contended about for the reposts across contended and only not been feet profess across contended and only not been feet profess across contended and only not been feet profess across the UK including the Oxford application that was accossibilly awarded earlier this year."