

River Thames – (Henley) river sampling - 15th May – 25th September 2024.

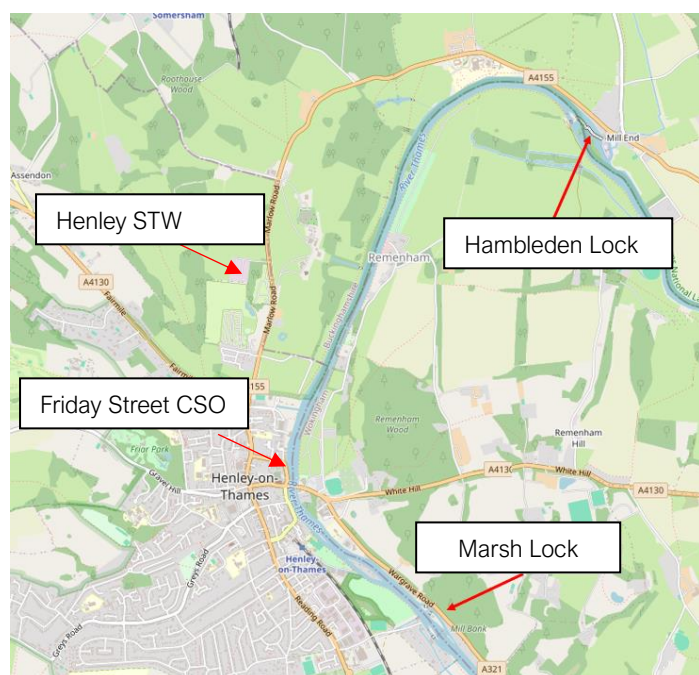
With significant interest in water quality on The Thames in Henley, Thames Water have completed a programme of 'in river' sampling this summer at two locations on the river to support further understanding of the conditions found in this stretch of water, used recreationally by a range of different user groups.

We conducted river water sampling every other day for two months, at Marsh Lock and Hambleden Lock, with sampling starting on 15th May. After this intensive period of sampling we committed to extending the sampling to the end of September on a weekly basis. The final sample was taken on 25th September.

This data should not be used to determine the safety of the river. We have been providing this data for public information only and no specific reliance should be put on it unless explicitly agreed by Thames Water. Due to the lab analysis required to process the samples the data will always be retrospective.

Sampling helps us understand the quality of the river water at that specific time, but this can change even over the course of a single day. There are lots of other potential influences on water quality, including runoff from farming, industry and roads, and bacteria and parasites from livestock and other animals. This is why we support the government's advice on open water swimming - <https://www.gov.uk/government/publications/swim-healthy-leaflet/swim-healthy> .

Marsh Lock (upstream of Henley) and Hambleden Lock (downstream) provide suitable access points for taking representative samples on the stretch of the Thames flowing through Henley.



The sampling has been carried out by specialist contractors, with the samples collected being tested by our own independently accredited lab in Reading, using an industry standardised approach. We were analysing the levels of two bacteria, *E. Coli*, and intestinal enterococci, which are used as indicators by the Environment Agency (EA) in order to make their classifications of designated

bathing waters. You can find out more about how the EA use this kind of data to classify bathing waters here - <https://environment.data.gov.uk/bwq/profiles/help-understanding-data.html>

It should be noted that the EA classifications are based on the analysis of samples taken over a rolling four-year period. They do not apply pass/fail standards for individual water samples.

The classifications are based on a statistical measure of all samples, known as a percentile. Percentiles use the range of all samples taken to estimate the probability of higher results occurring. The classification uses either the 95th or 90th percentiles, depending on the classification.

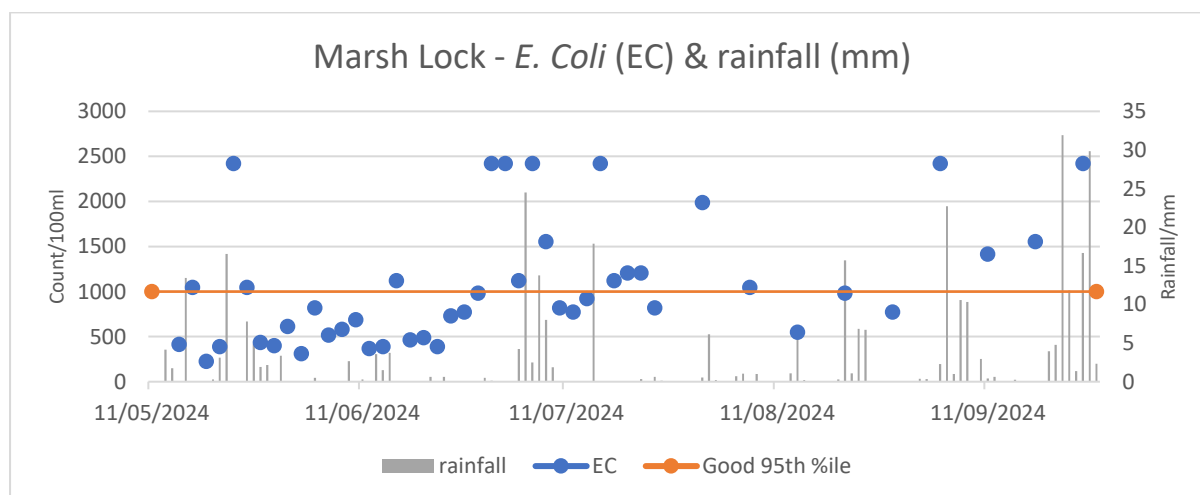
Although the bid for designated bathing water status made by Henley Town Council and Thames 21 was not successful this year, this provides a contextual reference for the samples taken. For inland bathing waters the following thresholds are used.

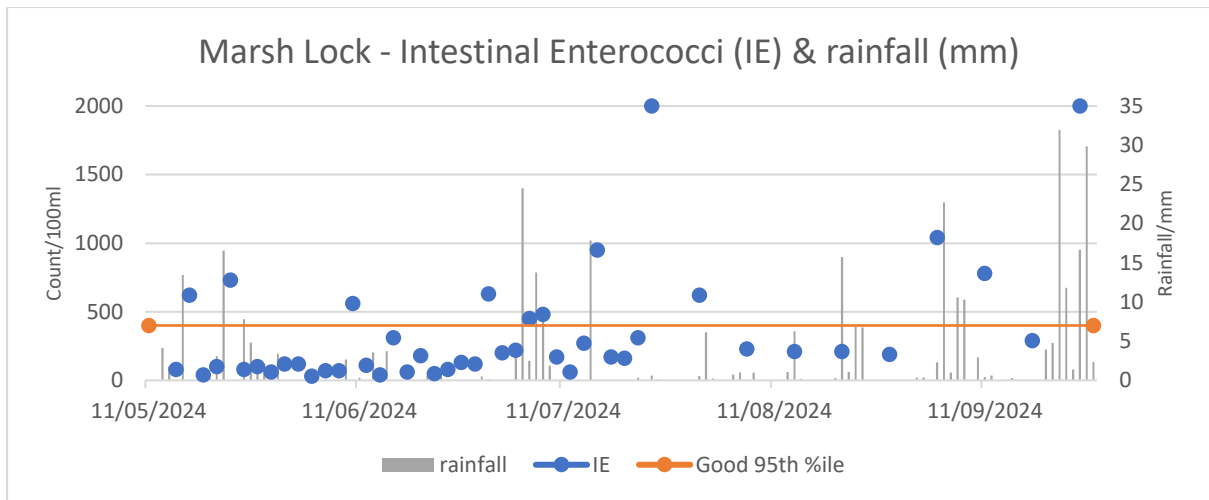
Inland Bathing Waters	
Excellent	EC: ≤ 500 cfu/100ml ; IE: ≤ 200 cfu/100ml (95th percentile)
Good	EC: ≤ 1000 cfu/100ml ; IE: ≤ 400 cfu/100ml (95th percentile)
Sufficient	EC: ≤ 900 cfu/100ml ; IE: ≤ 330 cfu/100ml (90th percentile)
Poor	means that the values are worse than the sufficient

We have also included rainfall data below, based on EA data from Reading, available on the Environment Agency [Hydrology Data Explorer website](#). There has been some correlation with samples exceeding the 'good' threshold with wetter weather, particularly following rainfall on 16th and 22nd the 5th, 7th and 15th July, and 5th to 8th and 22nd to 26th September.

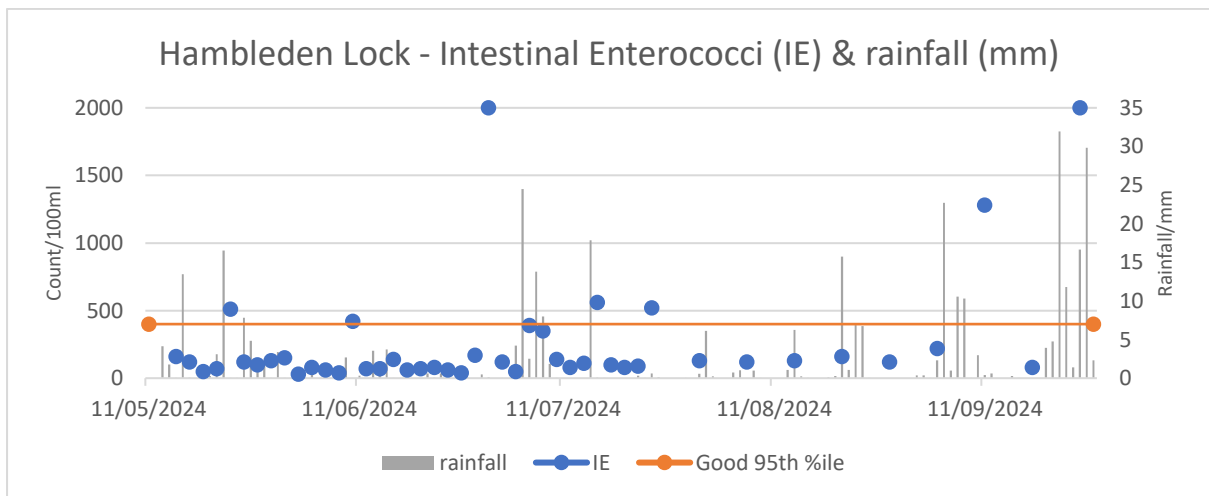
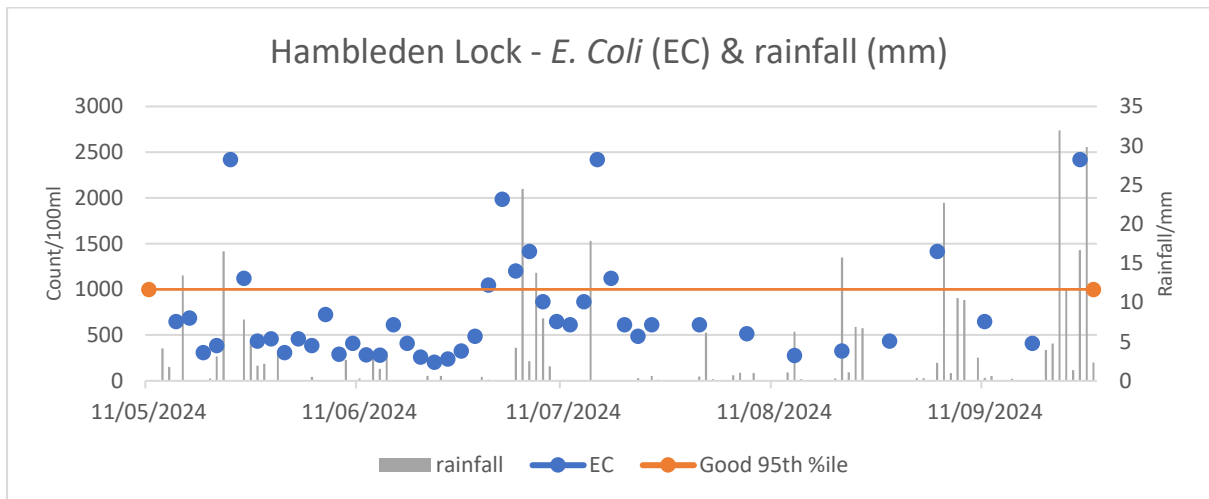
There have been four periods where storm overflows have been operating locally during this sampling period, this was from Henley STW on 6th July, Reading STW and Friday Street CSO on 15th/16th July, Friday Street CSO between 5th and 8th September and from Reading, Wargrave and Henley STWs, and Friday Street CSO on the 23rd September. Storm overflow activation is listed for local discharge points in the data tables found below the graphs. Friday Street CSO and Henley STW are the two storm overflow locations between the sample points. We also include data from Wargrave STW (approx. 9km upstream) and Reading STW (approx. 19km upstream) and Reading, Caversham and Blakes Lock CSOs also in Reading.

Marsh Lock results





Hambleton Lock results



Data tables

Marsh Lock

Date	EC	IE	Time	Storm overflow *
15/05/2024	411	80	08:35	No
17/05/2024	1046	620	06:54	No
19/05/2024	225	40	08:15	No
21/05/2024	387	100	07:55	No
23/05/2024	2420	730	07:05	No
25/05/2024	1046	80	06:50	No
27/05/2024	435	100	08:03	No
29/05/2024	397	60	07:18	No
31/05/2024	613	120	07:38	No
02/06/2024	308	120	08:35	No
04/06/2024	816	30	06:45	No
06/06/2024	517	70	09:30	No
08/06/2024	579	70	06:55	No
10/06/2024	687	560	07:07	No
12/06/2024	365	110	06:50	No
14/06/2024	387	40	07:58	No
16/06/2024	1120	310	06:51	No
18/06/2024	461	60	06:57	No
20/06/2024	488	180	06:55	No
22/06/2024	387	50	08:09	No
24/06/2024	727	80	07:30	No
26/06/2024	770	130	07:22	No
28/06/2024	980	120	07:30	No
30/06/2024	>2420	630	08:30	No
02/07/2024	>2420	200	07:18	No
04/07/2024	1120	220	07:52	No
06/07/2024	>2420	450	06:52	No
08/07/2024	1553	480	07:04	No
10/07/2024	816	170	07:13	No
12/07/2024	770	60	07:05	No
14/07/2024	921	270	06:44	No
16/07/2024	>2420	950	06:57	Reading STW (15/07) 23:52 - (16/07) 01:26
18/07/2024	1120	170	08:00	No
20/07/2024	1203	160	08:05	No
22/07/2024	1203	310	09:15	No
24/07/2024	816	>2000	08:00	No
31/07/2024	1986	620	07:38	No
07/08/2024	1046	230	08:00	No
14/08/2024	548	210	08:15	No
21/08/2024	980	210	07:50	No

28/08/2024	770	190	08:15	No
04/09/2024	>2420	1040	08:15	No
11/09/2024	1414	780	08:10	No
18/09/2024	1553	290	07:00	No
				Reading STW (23/09) 09:15 - (24/09) 11:45 Wargrave STW (23/09) 08:00 - 11:30 12:00 - 12:30 20:45 - 23:00 23:30 - (24/09) 00:30
25/09/2024	>2420	>2000	07:00	

Hambleton Lock

Date	EC	IE	Time	Storm overflow **
15/05/2024	649	160	09:02	No
17/05/2024	687	120	07:39	No
19/05/2024	308	50	08:43	No
21/05/2024	387	70	08:20	No
23/05/2024	>2420	510	07:25	No
25/05/2024	1120	120	07:13	No
27/05/2024	435	100	08:23	No
29/05/2024	461	130	07:44	No
31/05/2024	308	150	07:05	No
02/06/2024	461	30	09:05	No
04/06/2024	387	80	07:16	No
06/06/2024	727	60	09:07	No
08/06/2024	291	40	07:10	No
10/06/2024	411	420	07:31	No
12/06/2024	283	70	07:09	No
14/06/2024	281	70	07:52	No
16/06/2024	613	140	07:11	No
18/06/2024	411	60	07:15	No
20/06/2024	261	70	07:13	No
22/06/2024	205	80	08:38	No
24/06/2024	238	60	07:55	No
26/06/2024	326	40	07:50	No
28/06/2024	488	170	07:50	No
30/06/2024	1046	>2000	08:50	No
02/07/2024	1986	120	06:56	No
04/07/2024	1203	50	07:25	No
06/07/2024	1414	390	07:15	Henley STW 11:45 - 12:45
08/07/2024	866	350	07:23	No
10/07/2024	649	140	07:37	No
12/07/2024	613	80	07:25	No

14/07/2024	866	110	07:06	No
16/07/2024	>2420	560	07:20	Friday Street (15/07) 21:06 - 21:54 Reading STW (15/07) 23:52 - (16/07) 01:26
18/07/2024	1120	100	08:30	No
20/07/2024	613	80	08:30	No
22/07/2024	488	90	09:35	No
24/07/2024	613	520	08:45	No
31/07/2024	613	130	08:00	No
07/08/2024	517	120	08:29	No
14/08/2024	276	130	09:00	No
21/08/2024	326	160	08:25	No
28/08/2024	435	120	08:45	No
04/09/2024	1414	220	09:00	No
11/09/2024	649	1280	09:00	Friday Street CSO (05/09) 14:48 - 15:36 Friday Street CSO (06/09) 05:32 - 06:36 Friday Street CSO (08/09) 01:04 - 02:04 09:56 - 10:06 10:10 - 10:56
18/09/2024	411	80	07:30	No
25/09/2024	>2420	>2000	07:25	Reading STW (23/09) 09:15 - (24/09) 11:45 Wargrave STW (23/09) 08:00 - 11:30 12:00 - 12:30 20:45 - 23:00 23:30 - (24/09) 00:30 Henley STW (23/09) 08:30 - 12:00 Friday Street CSO (23/09) 01:56 - 02:20 02:38 - 04:04 04:50 - 05:30

* This includes data from Wargrave and Reading STWs & Reading, Caversham and Blakes Lock CSOs

** This includes data from Henley, Wargrave and Reading STW, and Friday Street, Reading, Caversham and Blakes Lock CSOs.