Water data from Little Stoke from September 2022 – August 2025

Sample date	EC level	P level	N level	Overall status
11.9.22 16.30	835	**0.66**	2.0	Average/Poor
2.12.22 10.52	697	**0.56**	2.0	Average/Poor
28.5.23 13.05	693	0.37	2.0	Average
8.6.23 13.10	674	**0.57**	2.0	Average/Poor
22.7.23 08.34	695	**0.84**	2.0	Suggests recent and repeated sewage discharges from mid July to mid October 23
27.8.23 09.16	616	**1.06**	2.0	
8.10.23 16.15	703	**0.96**	2.0	
31.10.23 10.27	649	**0.67**	2.0	Average/Poor
3.12.23 08.45	714	0.33	2.0	Average.
26.1.24 10.31	659	0.32	2.0	
8.3.24 10.29	618	0.16	2.0	Average
15.5.24 11.36	680	0.38	2.0	
2.6.24 09.25	663	**0.59**	2.0	Ave/Poor
28.7.24 14.05	718	**0.75**	2.0	
11.8.24 09.14	680	**0.8**	2.0	
11.9.24 10.30	709	**0.78**	2.0	Average
20.10.24 13.55	603	0.38	**5.0**	Inc in Nitrate
3.11.24 10.35	686	0.4	2.0	
2.02.25 10.21	600	0.4	1.0	
6.3.25 10.52	670	0.37	**5.0**	Nitrate appears to be running higher
25.4.25 11.58	667	**0.5**	**5.0**	Average/Poor
20.6.24 10.51	732	**0.8**	**5.0**	
10.8.25 11.21	774	**0.89**	**5.0**	

Overall observations

- **Nitrate** levels consistent until late 24 subsequent moves to nest level up. As most excess nitrate comes from fertiliser run offs it suggests that farms upstream generally have good practices. T**he 2 suggests elevated levels, but not excessively so, 5 a deterioration.**

- **Phosphate** variable. Most phosphate comes from untreated/partially treated sewage suggesting periodic spills affecting the water. **In general a reading under 0.3 is good; above this it is poor.** Most of the readings are poor, and the average puts it firmly in the poor category.

- **EC** is measured in micro siemens per centimetre (don't worry I don't understand this either). In itself the reading is neither bad nor good, but the higher the reading the more the presence of dissolved salts in the sample, which may be harmful. Melted snow is > 42, rivers on average in the range 50 -1500 and chalk stream 100 - 2000. The variation however is significant with a highest reading of 835 and a lowest of 616, and most in the range 616 - 714, averaging around 675, which puts it squarely in the expected range.

- In general over the period, winter levels have been above long term winter average and summer levels below long term summer averages. In summer water temperature is higher with reduced volumes suggesting a greater concentration of dissolved salts (EC measure). During low flows PH readings generally significantly higher than in higher winter flows, which is consistent with other data which shows that sewage discharges are not exceptional events caused by high rainfall as water companies repeatedly claim but standard practice. South Moreton (discharges upstream at Wallingford) is one of the worst nationally, with total discharges 4.24 -4.25 around the equivalent of half the days in the year.

- Although water companies must now report discharges which arise where the capacity in the treatment tanks is excessive, research has shown that some companies now divert input **before** it reaches treatment tanks **and such diversions are not recorded in the data. In other words recorded discharges do not record actual discharges of untreated waste water.** This helps to explain why PH recorded levels are high even when recorded discharges have not impacted on samples.

- **The data above shows an underlying decline in water quality as measured at the site since 2022:**

2022-23 Average (9):	**N 2.0 PH 0.56**
2024 Average (9):	**N 2.3 PH 0.51**
2025 Average (5):	**N 4.2 PH 0.59**