

Table 1. Concentrations of heavy metals in different location of River Thames

	mg/L				
	Upstream	<i>s. err.</i>	Downstream	<i>s. err.</i>	Increase %*
Cadmium	0.0245	0.0035	0.0220	0.0028	-10
Copper	3.774	1.0030	3.7800	0.7950	0
Iron	3.1565	1.0475	6.4805	0.9265	105
Lithium	8.3995	0.4825	8.9755	2.5945	6
Manganese	2.6310	0.7518	2.7915	0.7518	6
Potassium	26.6300	14.7400	26.3600	n.a.	-1
Zinc	22.7000	3.3200	18.3700	1.6700	-19

* Increase in terms of concentration (percentage of increase) from upstream to upstream.

Table 2. Relative gene expression of *S. flexneri tetR* and *tetA* on treated and untreated Thames water and M9 medium microcosms.

	$\log_2(\text{fold increase})=\text{treated}/\text{untreated}^*$		
	Upstream	Downstream	M9
<i>tetR</i>	1.29	1.38	1.72
<i>tetA</i>	0.68	0.93	5.60

* fold increase of treated/untreated water with 10µg/mL oxytetracycline in upstream, downstream Thames river and M9 medium. represents significant difference at $p<0.05$. Error bars represent standard error.

Table 3. Concentration of tetracycline degraded in *S. flexneri* 2a YSH6000 culture in downstream water microcosm containing FeCl₃.

	Day (µg/L)	
	1	3
Downstream FeCl ₃ 6 mg/L	1.29 (0.19)*	1.18 (0.17)
Downstream FeCl ₃ 12 mg/L	1.46 (0.06)	1.86 (0.09)
M9 FeCl ₃ 6 mg/L	3.50 (1.05)	1.73 (0.01)

* Standard error in brackets